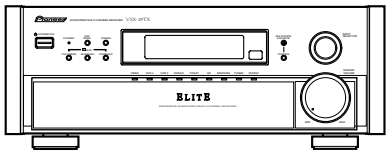
Service Manual



ORDER NO.
RRV2133

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-29TX
VSX-27TX
VSX-26TX
VSX-24TX
VSX-D908S

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model					Power Requirement	Remarks
	VSX-29TX	VSX-27TX	VSX-26TX	VSX-24TX	VSX-D908S		
KU/CA	○	○	○	○	○	AC120V	

CONTENTS

1. SAFETY INFORMATION ····· 2
2. EXPLODED VIEWS AND PARTS LIST ····· 3
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM ··· 10
4. PCB CONNECTION DIAGRAM ····· 48
5. PCB PARTS LIST ····· 71
6. ADJUSTMENT ····· 83
7. GENERAL INFORMATION ····· 84
   7.1 DISASSEMBLY ····· 84
   7.2 PARTS ····· 86
      7.2.1 IC ····· 86
      7.2.2 DISPLAY ····· 90
   7.3 REMOTE CONTROL UNIT ····· 92
8. PANEL FACILITIES AND SPECIFICATIONS ····· 103

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

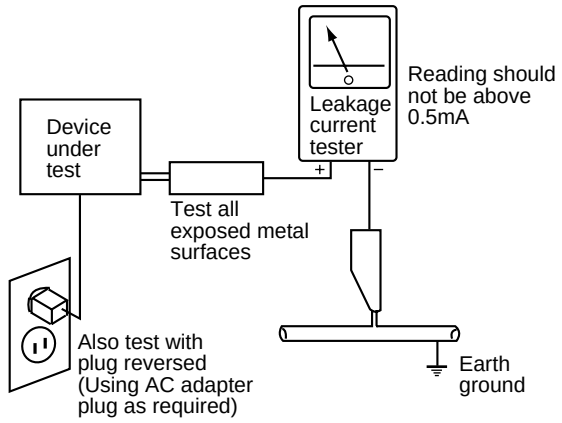
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Reading should not be above 0.5mA
Leakage current tester
+
–
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

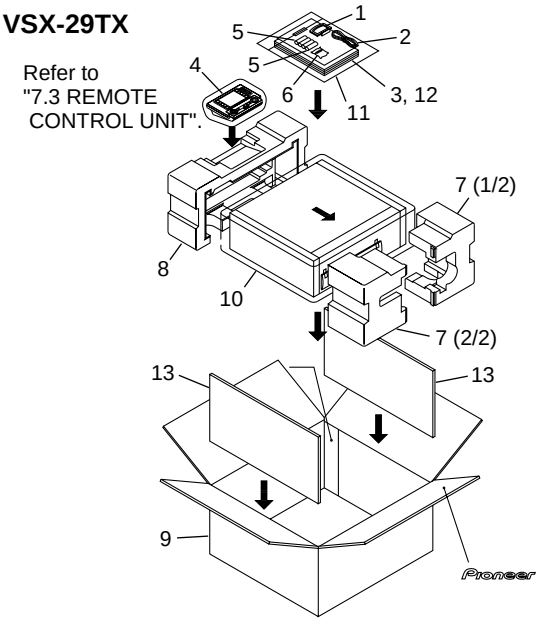
Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

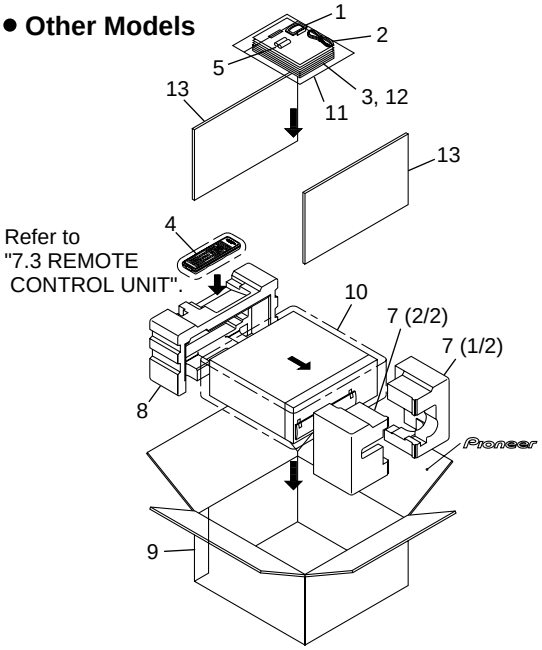
NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *Screws adjacent to ▼ mark on the product are used for disassembly.*

2.1 PACKING

● **VSX-29TX**



● **Other Models**



(1) PACKING PARTS LIST

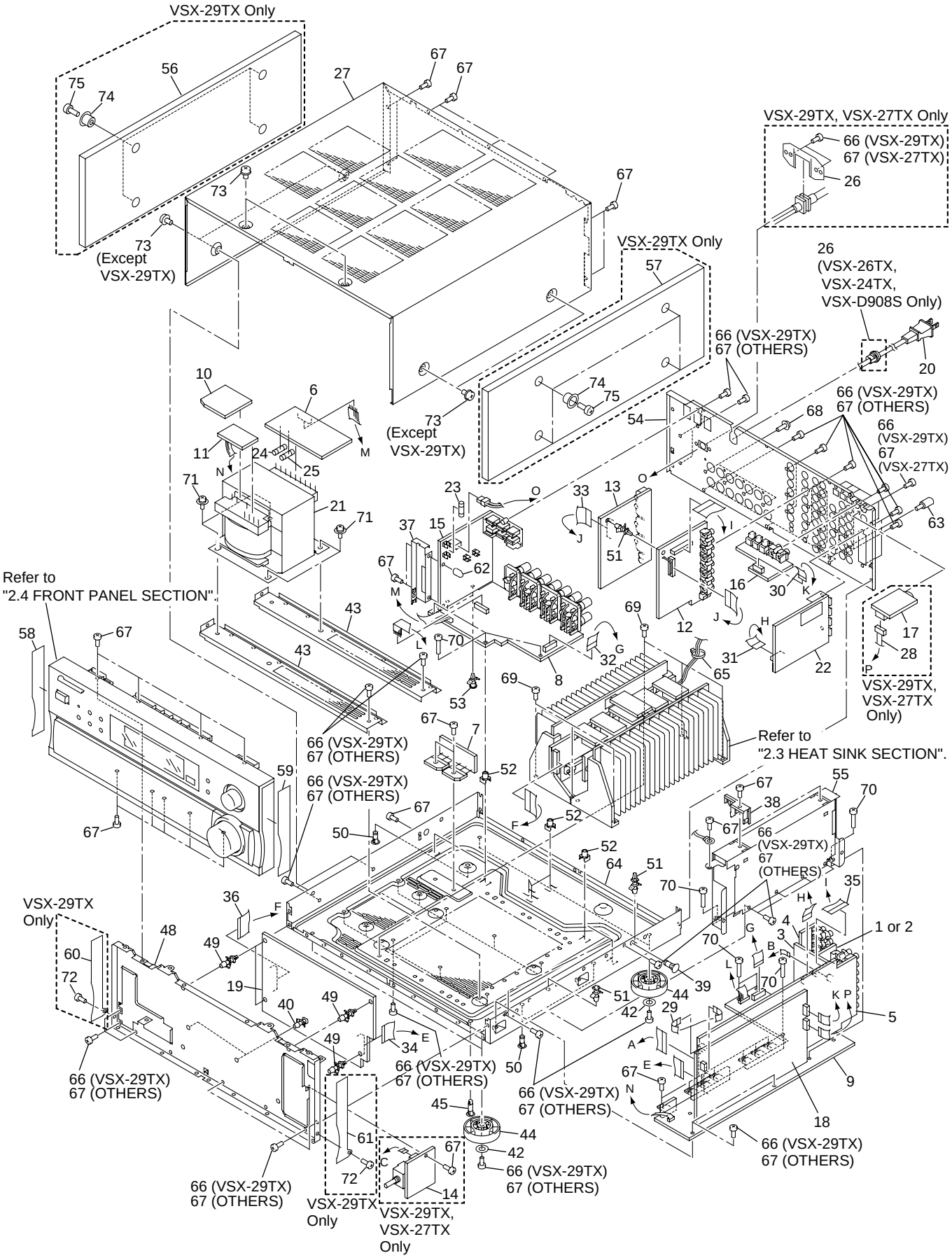
Mark	No.	Description	Part No.
	1	AM Loop Antenna	ATB7009
	2	FM Wire Antenna	ADH1015
	3	Operating Instructions (English)	See Contrast table (2)
	4	Remote Control Unit	See Contrast table (2)
NSP	5	Alkaline Dry Cell Battery (LR6, AA)	VEM1012
	6	Cushion for Remote (for Remote Control Unit)	See Contrast table (2)
	7	Front Pad	See Contrast table (2)
	8	Rear Pad	See Contrast table (2)
	9	Packing Case	See Contrast table (2)
	10	Packing Sheet	RHC1023
	11	Polyethylene Bag (0.03×230×340)	Z21-038
NSP	12	Warranty Card	See Contrast table (2)
	13	Spacer	See Contrast table (2)

(2) CONTRAST TABLE

VSX-29TX, VSX-27TX, VSX-26TX, VSX-24TX and VSX-D908S are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.					Remaks
			VSX-29TX	VSX-27TX	VSX-26TX	VSX-24TX	VSX-D908S	
	3	Operating Instructions (English)	ARB7188	ARB7186	ARB7186	ARB7186	ARB7193	
	4	Remote Control Unit (CU-VSX158)	AXD7216	Not used	Not used	Not used	Not used	
	4	Remote Control Unit (CU-VSX159)	Not used	AXD7212	AXD7212	AXD7212	Not used	
	4	Remote Control Unit (CU-VSX161)	Not used	Not used	Not used	Not used	AXD7213	
	6	Cushion for Remote	AXG7080	Not used	Not used	Not used	Not used	
	7	Front Pad 29	AHA7255	Not used	Not used	Not used	Not used	
	7	Front Pad 26	Not used	AHA7253	AHA7253	AHA7253	AHA7253	
	8	Rear Pad 29	AHA7256	Not used	Not used	Not used	Not used	
	8	Rear Pad 26	Not used	AHA7254	AHA7254	AHA7254	AHA7254	
	9	Packing Case 29TX	AHD7810	Not used	Not used	Not used	Not used	
	9	Packing Case 27TX	Not used	AHD7783	Not used	Not used	Not used	
	9	Packing Case 26TX	Not used	Not used	AHD7811	Not used	Not used	
	9	Packing Case 24TX	Not used	Not used	Not used	AHD7784	Not used	
	9	Packing Case 908S	Not used	Not used	Not used	Not used	AHD7785	
NSP	12	Warranty Card EL	ARY1026	ARY1026	ARY1026	ARY1026	Not used	
	12	Warranty Card PA	Not used	Not used	Not used	Not used	ARY7023	
	13	Spacer 29	AHB7033	Not used	Not used	Not used	Not used	
	13	Spacer 26	Not used	AHB7032	AHB7032	AHB7032	AHB7032	

2.2 EXTERIOR


VSX-29TX Only
VSX-29TX, VSX-27TX Only
66 (VSX-29TX)
67 (VSX-27TX)
26
VSX-29TX Only
26
(VSX-26TX,
VSX-24TX,
VSX-D908S Only)
66 (VSX-29TX)
67 (OTHERS)
(Except
VSX-29TX)
Refer to
"2.4 FRONT PANEL SECTION".
Refer to
"2.3 HEAT SINK SECTION".
VSX-29TX,
VSX-27TX
Only)
VSX-29TX
Only
1 or 2
VSX-29TX,
VSX-27TX
Only

(1) EXTERIOR PARTS LIST

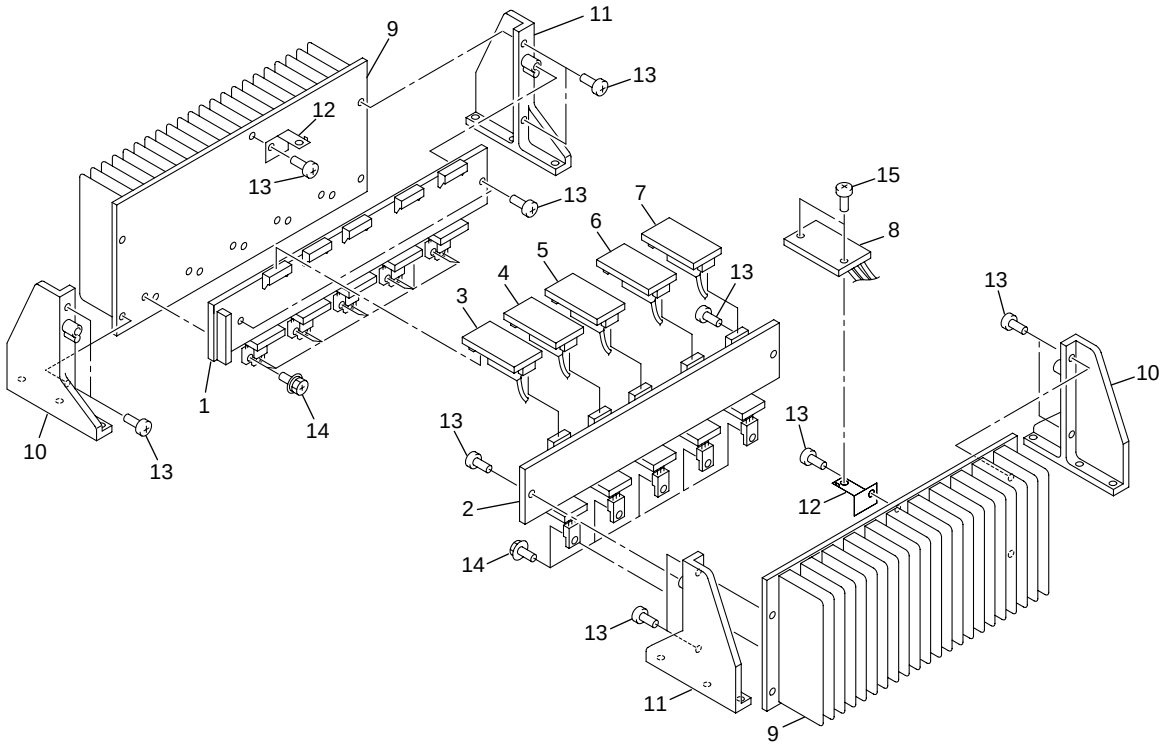
Mark	No.	Description	Part No.
NSP	1	EXTRA-5.1 Assy	See Contrast table (2)
NSP	2	EXTERNAL IN Assy	See Contrast table (2)
NSP	3	A-PINJACK Assy	See Contrast table (2)
	4	CONNECTION Assy	AWX7313
	5	MAIN CONTROL Assy	See Contrast table (2)
	6	TRANS 2-1 ASSY	AWX7326
	7	DIODE Assy	AWX7343
	8	SP/PS Assy	See Contrast table (2)
	9	REGULATOR Assy	AWX7310
	10	TRANS 1 Assy	AWX7316
	11	TRANS 2-2 Assy	AWX7366
	12	VIDEO Assy	See Contrast table (2)
	13	S-VIDEO Assy	See Contrast table (2)
	14	VOLUME Assy	See Contrast table (2)
	15	PRIMARY Assy	AWX7311
	16	DIGITAL-I/O Assy	See Contrast table (2)
NSP	17	RF TERMINAL Assy	See Contrast table (2)
NSP	18	DSP Assy	See Contrast table (2)
	19	V-AMP Assy	See Contrast table (2)
⚠	20	AC Power Cord	See Contrast table (2)
⚠	21	Power Transformer (T1)	ATS7252
	22	FM/AM TUNER Unit	AXX7046
⚠	23	Fuse (FU1 : 10A)	VEK1029
⚠	24	Fuse (FU4 : 2.5A)	REK1079
⚠	25	Fuse (FU5 : 2.5A)	REK1079
	26	AC Cord Spacer	See Contrast table (2)
	27	Bonnet Case	See Contrast table (2)
	28	2P Shield with Housing (J24)	See Contrast table (2)
	29	Lead Card 07P (J13)	ADD7161
	30	Lead Card 11P AD (J22)	ADD7170
	31	Lead Card 13P AD (J16)	ADD7169
	32	Lead Card 14P (J17)	ADD7165
	33	Lead Card 21P (J18)	ADD7164
	34	Lead Card 23P BD SLD (J12)	ADD7160
	35	Lead Card 26P (J15)	ADD7163
	36	Lead Card 28P (J23)	ADD7171
	37	Assy Holder	See Contrast table (2)
	38	Assy Holder B	AMR7267
	39	Card Spacer	AEC7133
	40	Card Spacer	DEC1772
	41	• • • • •	
	42	Cushion 55	PNM1316
NSP	43	Frame	See Contrast table (2)
	44	Insulator	PNW2766
	45	Locking Card Spacer	DEC1908
	46	• • • • •	
	47	• • • • •	
NSP	48	Panel Stay	See Contrast table (2)
	49	PC Support	VEC1549
NSP	50	PCB Holder	AEC7057
NSP	51	PCB Holder	PNW2100
NSP	52	PCB Mould	AMR1525
	53	PCB Spacer	AEC1372
	54	Rear Panel	See Contrast table (2)
	55	Shield Case	See Contrast table (2)
	56	Side Board 29 L	See Contrast table (2)
	57	Side Board 29 R	See Contrast table (2)
	58	Side Escutheon L	See Contrast table (2)
	59	Side Escutheon R	See Contrast table (2)
	60	Side Sash L 29	See Contrast table (2)
	61	Side Sash R 29	See Contrast table (2)
	62	Stud Cover	AEC7105
	63	Terminal Screw	AKE-031
NSP	64	Under Base 29	See Contrast table (2)
NSP	65	Binder (BK-1)	ZCA-BK1
	66	Screw	BBT30P080FCC
	67	Screw	BBZ30P080FZK
	68	Screw	ABA1193
	69	Screw	IBZ30P080FCC
	70	Screw	BBZ30P180FMC
	71	Screw	See Contrast table (2)
	72	Screw	BBT30P040FZK
	73	Screw	FBT40P080FZK
	74	Wood Collar	See Contrast table (2)
	75	Screw	See Contrast table (2)

(2) CONTRAST TABLE

VSX-29TX, VSX-27TX, VSX-26TX, VSX-24TX and VSX-D908S are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.					Remaks
			VSX-29TX	VSX-27TX	VSX-26TX	VSX-24TX	VSX-D908S	
NSP	1	EXTRA-5.1 Assy	AWX7314	Not used	Not used	Not used	Not used	
NSP	2	EXTERNAL IN Assy	Not used	AWX7398	AWX7398	AWX7398	AWX7398	
NSP	3	A-PINJACK Assy	AWX7312	AWX7397	AWX7397	AWX7401	AWX7397	
	5	MAIN CONTROL Assy	AWX7306	AWX7393	AWX7399	AWX7406	AWX7424	
	8	SP/PS Assy	AWX7272	AWX7272	AWX7433	AWX7433	AWX7433	
	12	VIDEO Assy	AWX7307	AWX7394	AWX7394	AWX7407	AWX7394	
	13	S-VIDEO Assy	AWX7308	AWX7395	AWX7395	AWX7395	AWX7395	
	14	VOLUME Assy	AWX7367	AWX7367	Not used	Not used	Not used	
	16	DIGITAL-I/O Assy	AWX7315	AWX7396	AWX7396	AWX7396	AWX7396	
NSP	17	RF TERMINAL Assy	AWX7376	AWX7376	Not used	Not used	Not used	
NSP	18	DSP Assy	AWX7272	AWX7272	AWX7433	AWX7433	AWX7433	
	19	V-AMP Assy	AWX7309	AWX7309	AWX7309	AWX7409	AWX7409	
⚠	20	AC Power Cord	ADG7028	ADG7028	ADG7024	ADG7024	ADG7024	
	26	AC Cord Spacer	ANG1153	ANG1153	Not used	Not used	Not used	
	26	Cord Stopper	Not used	Not used	CM-22C	CM-22C	CM-22C	
	27	Bonnet Case 29	AZN7790	Not used	Not used	Not used	Not used	
	27	Bonnet Case 26	Not used	AZN7789	AZN7789	AZN7789	AZN7789	
	28	2P Shield with Housing (J24)	ADX7250	ADX7250	Not used	Not used	Not used	
	37	Assy Holder	ANG7139	ANG7121	ANG7121	ANG7121	ANG7121	
NSP	43	Frame 29	ANG7243	Not used	Not used	Not used	Not used	
NSP	43	Frame 26	Not used	ANG7238	ANG7238	ANG7238	ANG7238	
NSP	48	Panel Stay 29	AND7032	Not used	Not used	Not used	Not used	
NSP	48	Panel Stay 26	Not used	AND7031	AND7031	AND7031	AND7031	
	54	Rear Panel 29	ANC7738	Not used	Not used	Not used	Not used	
	54	Rear Panel 27	Not used	ANC7737	Not used	Not used	Not used	
	54	Rear Panel 26	Not used	Not used	ANC7736	Not used	Not used	
	54	Rear Panel 24	Not used	Not used	Not used	ANC7847	Not used	
	54	Rear Panel D908S	Not used	Not used	Not used	Not used	ANC7848	
	55	Shield Case 29	ANK7055	Not used	Not used	Not used	Not used	
	55	Shield Case 26	Not used	ANK7054	ANK7054	ANK7054	ANK7054	
	56	Side Board 29 L	AMS7013	Not used	Not used	Not used	Not used	
	57	Side Board 29 R	AMS7014	Not used	Not used	Not used	Not used	
	58	Side Escutheon L 29	AAK7635	Not used	Not used	Not used	Not used	
	58	Side Escutheon L 26	Not used	AAK7633	AAK7633	AAK7633	AAK7633	
	59	Side Escutheon R 29	AAK7636	Not used	Not used	Not used	Not used	
	59	Side Escutheon R 26	Not used	AAK7634	AAK7634	AAK7634	AAK7634	
	60	Side Sash L 29	AAH7019	Not used	Not used	Not used	Not used	
	61	Side Sash R 29	AAH7020	Not used	Not used	Not used	Not used	
NSP	64	Under Base 29	ANA7091	Not used	Not used	Not used	Not used	
NSP	64	Under Base 26	Not used	ANA7089	ANA7089	ANA7089	ANA7089	
	71	Screw	ABA1015	ABA1015	ABA1015	ABA1015	ABA1053	
	74	Wood Collar	AEC1165	Not used	Not used	Not used	Not used	
	75	Screw	ABA1086	Not used	Not used	Not used	Not used	

2.3 HEAT SINK SECTION



(1) HEAT SINK SECTION PARTS LIST

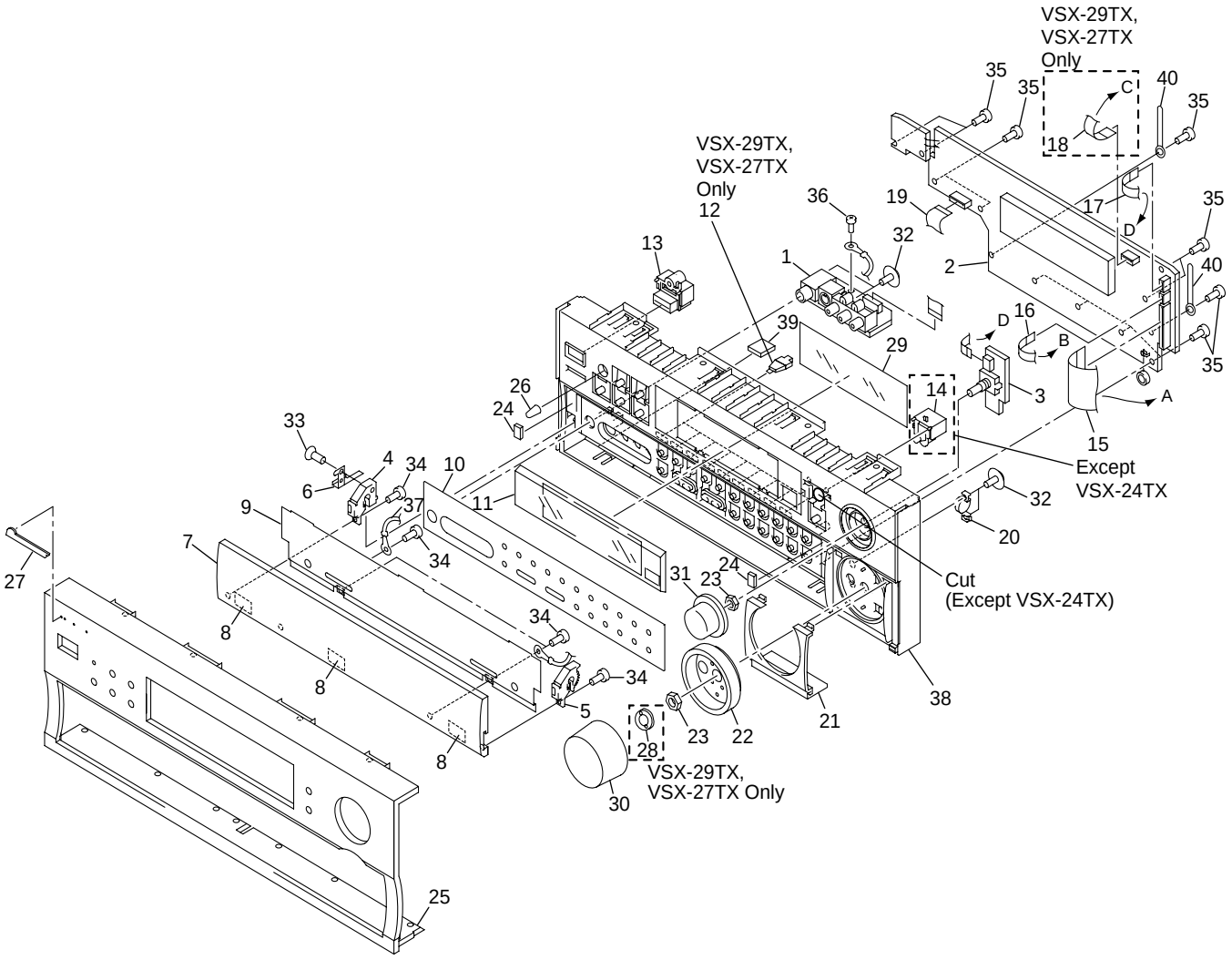
Mark	No.	Description	Part No.
	1	C-AMP N Assy	AWX7318
NSP	2	C-AMP-P Assy	AWX7317
NSP	3	OUTPUT-SL Assy	AWX7322
NSP	4	OUTPUT-FL Assy	AWX7319
	5	OUTPUT-C Assy	AWX7321
NSP	6	OUTPUT-FR Assy	AWX7320
NSP	7	OUTPUT-SR Assy	AWX7323
	8	VL-TERMINAL Assy	AWX7324
NSP	9	Heat Sink	See Contrast table (2)
	10	Heat Sink Holder A	AMR7255
	11	Heat Sink Holder B	AMR7256
NSP	12	Power Supply Plate	ANG7240
	13	Screw	BBZ30P080FZK
	14	Screw	ABA1082
	15	Screw	IBZ30P080FCC

(2) CONTRAST TABLE

VSX-29TX, VSX-27TX, VSX-26TX, VSX-24TX and VSX-D908S are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.					Remaks
			VSX-29TX	VSX-27TX	VSX-26TX	VSX-24TX	VSX-D908S	
NSP	9	Heat Sink D10	ANH7103	ANH7103	Not used	Not used	Not used	
NSP	9	Heat Sink 26	Not used	Not used	ANH7102	ANH7102	ANH7102	

2.4 FRONT PANEL SECTION



(1) FRONT PANEL SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	H. PHONE/F. VIDEO Assy	AWX7342
	2	DISPLAY Assy	See Contrast table (2)
NSP	3	ROTARY ENCODER Assy	See Contrast table (2)
	4	Door Hinge 26 L	AMR7252
	5	Door Hinge 26 R	AMR7253
NSP	6	Magnet Angle	ANG7241
	7	Door Panel	See Contrast table (2)
NSP	8	Spacer	VEC-244
NSP	9	Door Plate 26	AAH7024
	10	Door Sheet	See Contrast table (2)
	11	Display Panel 26	AAK7625
	12	Function Lens 27	See Contrast table (2)
	13	Power Button (STANDBY/ON)	AAD7440
	14	MR Button 26 (MULTIROOM)	See Contrast table (2)
	15	Lead Card 32P (J11)	ADD7159
	16	Lead Card 05P (J14)	ADD7162
	17	Lead Card 06P (J20)	ADD7167
	18	Lead Card 08P (J19)	See Contrast table (2)
	19	Lead Card 12P (J21)	ADD7166
	20	Damper Assy (60)	AXA7078
	21	Sub Panel	See Contrast table (2)
	22	Volume Ring	See Contrast table (2)
	23	Nut	NK90FUC
	24	Door Cusion B	AEB7152
	25	Front Panel	See Contrast table (2)
	26	LED Lens	PNW2019
	27	Name Plate B	PAN1376
	28	Ring Spacer D5	See Contrast table (2)
	29	FL Sheet 26	AAK7627
	30	Volume Knob (MASTER VOLUME)	See Contrast table (2)
	31	Rotary Knob (INPUT SELECTOR)	See Contrast table (2)
	32	Screw	ABA7053
	33	Screw	PBA1096
	34	Screw	BPZ30P060FMC
	35	Screw	BPZ30P080FMC
	36	Screw	BBZ30P080FZK
NSP	37	Cord with Plug	ADH7020
	38	Panel Base	See Contrast table (2)
	39	Magnet	AMF7002
	40	Cord Clamper	RNH-184

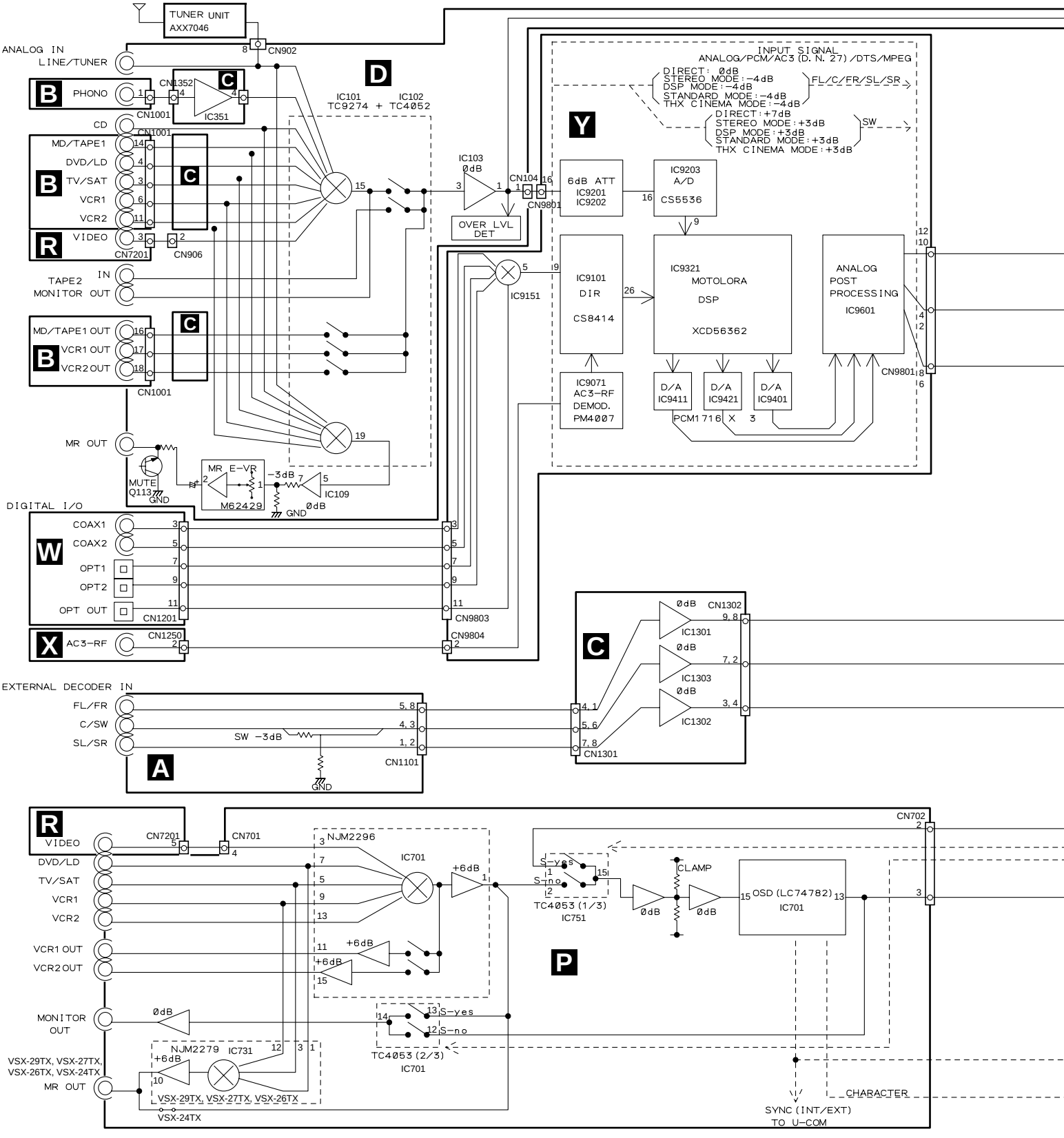
(2) CONTRAST TABLE

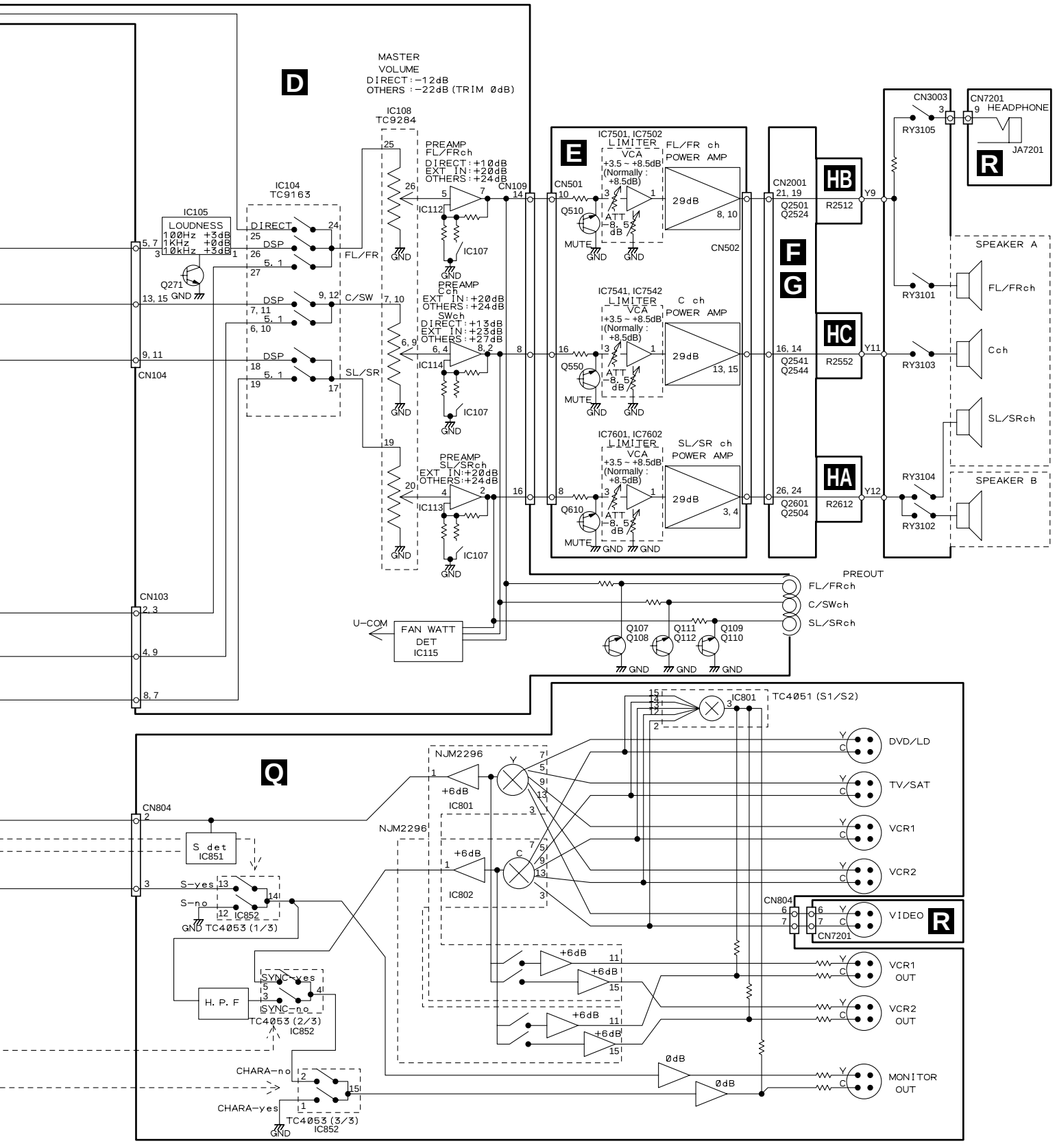
VSX-29TX, VSX-27TX, VSX-26TX, VSX-24TX and VSX-D908S are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.					Remaks
			VSX-29TX	VSX-27TX	VSX-26TX	VSX-24TX	VSX-D908S	
	2	DISPLAY Assy	AWX7327	AWX7327	AWX7404	AWX7408	AWX7427	
NSP	3	ROTARY ENCODER Assy	AWX7328	AWX7328	AWX7405	AWX7405	AWX7405	
	7	Door Panel 26	AMB7574	AMB7574	AMB7574	Not used	Not used	
	7	Door Panel 24	Not used	Not used	Not used	AMB7633	Not used	
	7	Door Panel 908	Not used	Not used	Not used	Not used	AMB7624	
	10	Door Sheet 26	AAK7626	AAK7626	AAK7626	Not used	Not used	
	10	Door Sheet 98SD	Not used	Not used	Not used	AAK7677	Not used	
	10	Door Sheet 98CC	Not used	Not used	Not used	Not used	AAK7674	
	12	Function Lens 27	AAK7628	AAK7628	Not used	Not used	Not used	
	14	MR Button	AAD7514	AAD7514	AAD7514	Not used	AAD7514	
	18	Lead Card 08P (J19)	ADD7168	ADD7168	Not used	Not used	Not used	
	21	Sub Panel 29	AMB7622	AMB7622	Not used	Not used	Not used	
	21	Sub Panel 26	Not used	Not used	AMB7575	AMB7575	Not used	
	21	Sub Panel 908	Not used	Not used	Not used	Not used	AMB7617	
	22	Volume Ring D10	AAH7016	Not used	Not used	Not used	Not used	
	22	Volume Ring 26	Not used	AAK7623	AAK7623	AAK7623	AAK7623	
	25	Front Panel 29	AMB7566	Not used	Not used	Not used	Not used	
	25	Front Panel 27	Not used	AMB7567	Not used	Not used	Not used	
	25	Front Panel 26	Not used	Not used	AMB7568	Not used	Not used	
	25	Front Panel 24	Not used	Not used	Not used	AMB7613	Not used	
	25	Front Panel 98CC	Not used	Not used	Not used	Not used	AMB7623	
	28	Ring Spacer D5	AWL7038	AWL7038	Not used	Not used	Not used	
	30	Volume Knob 27	AAB7194	AAB7194	Not used	Not used	Not used	
	30	Volume Knob 26	Not used	Not used	AAB7193	AAB7193	AAB7193	
	31	Rotary Knob 27	AAB7197	AAB7197	Not used	Not used	Not used	
	31	Rotary Knob 26	Not used	Not used	AAB7196	AAB7196	AAB7196	
	38	Panel Base 27	AMB7570	AMB7570	Not used	Not used	Not used	
	38	Panel Base 26	Not used	Not used	AMB7569	AMB7569	AMB7569	

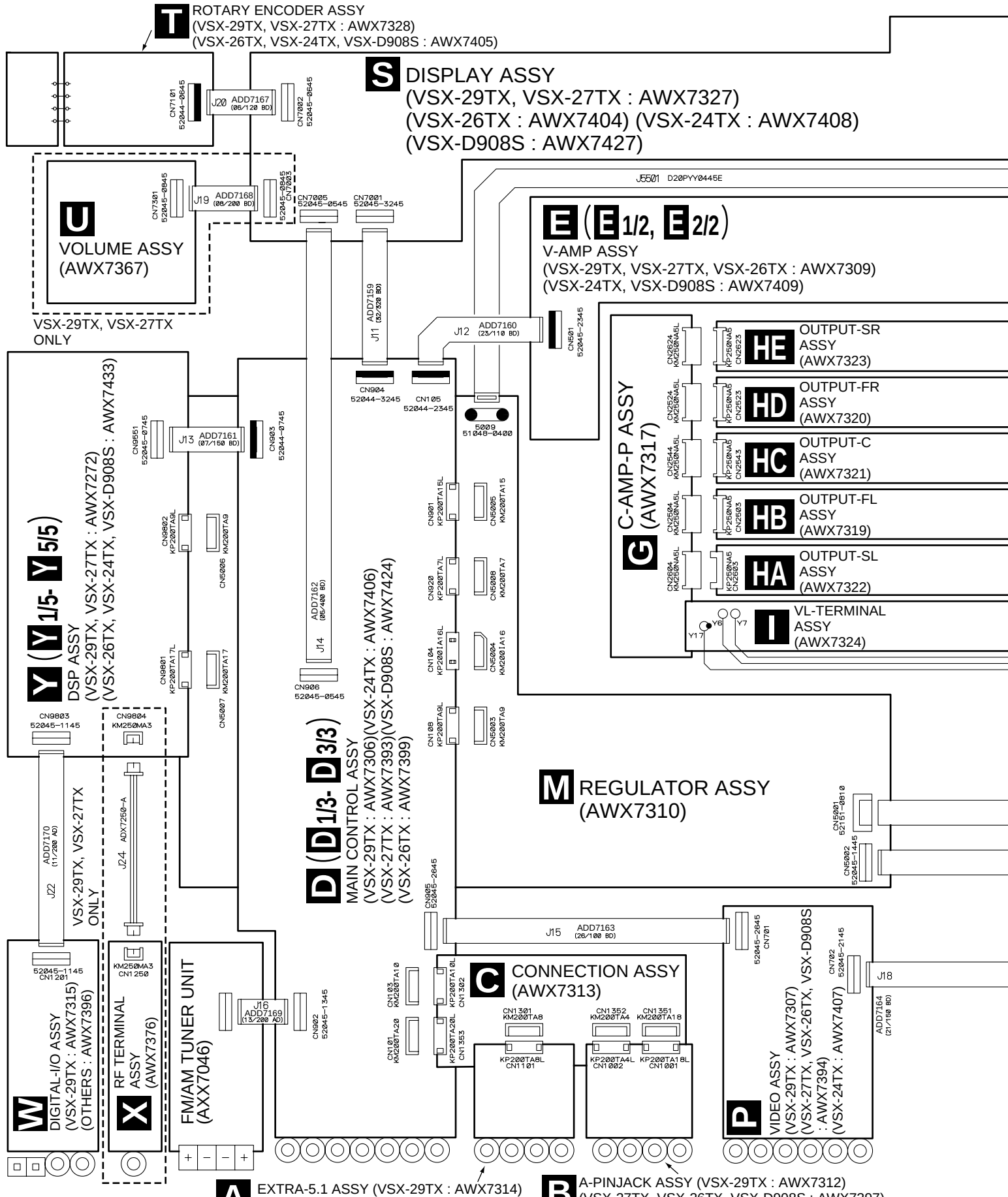
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

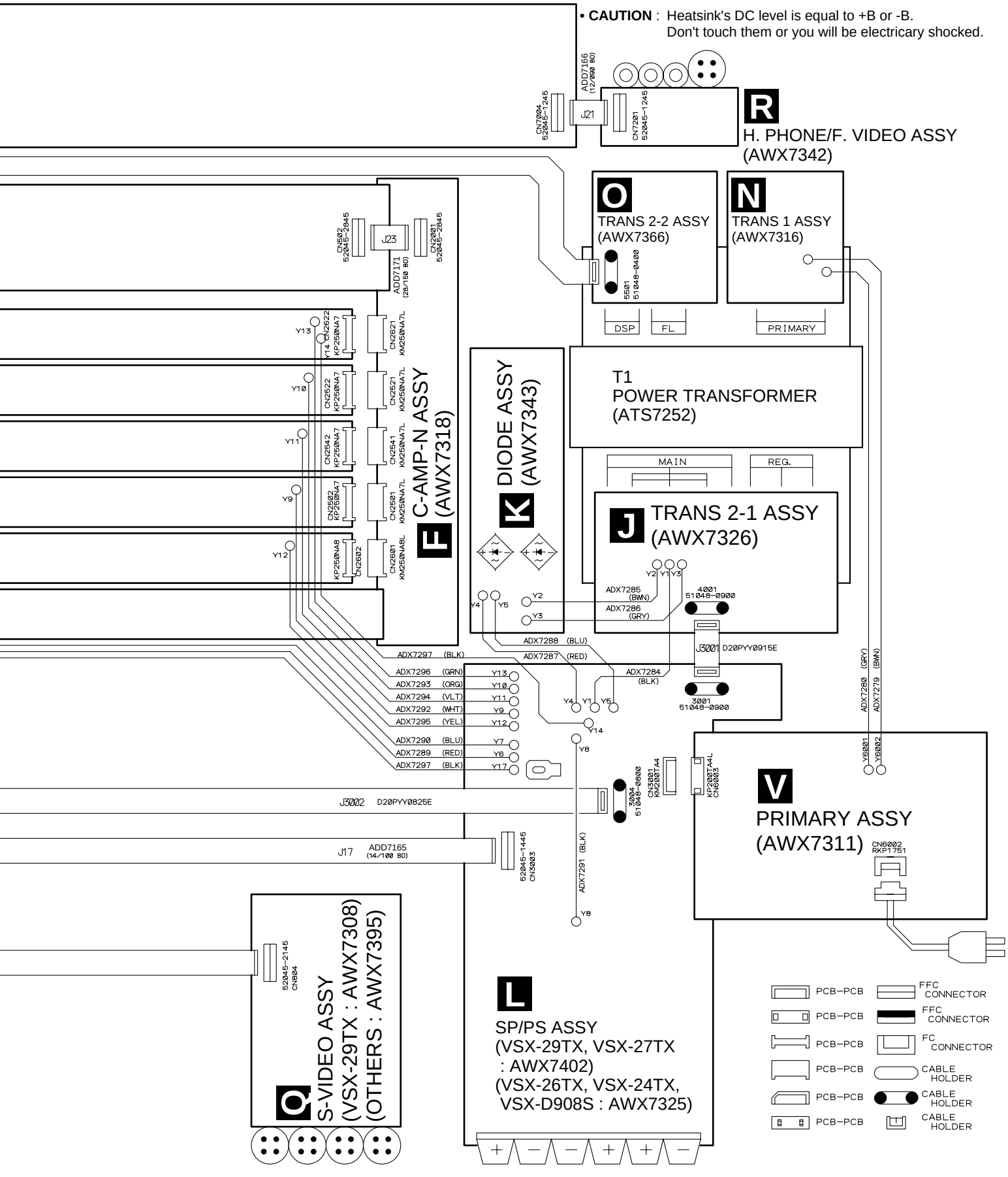



D
E
F
G
HB
HC
HA
R
Q
MASTER VOLUME
DIRECT : −12dB
OTHERS : −22dB (TRIM 0dB)
IC108 TC9284
IC104 TC9163
IC105
LOUDNESS
100Hz +3dB
1KHz +0dB
10kHz +3dB
PREAMP FL/FRch
DIRECT : +10dB
EXT IN : +20dB
OTHERS : +24dB
PREAMP Cch
EXT IN : +20dB
OTHERS : +24dB
SWch
DIRECT : +13dB
EXT IN : +23dB
OTHERS : +27dB
PREAMP SL/SRch
EXT IN : +20dB
OTHERS : +24dB
IC112
IC114
IC113
IC107
IC7501, IC7502
IC7541, IC7542
IC7601, IC7602
LIMITER VCA
+3.5 ~ +8.5dB
(Normally : +8.5dB)
ATT −8.5 dB
MUTE
FL/FR ch POWER AMP
C ch POWER AMP
SL/SR ch POWER AMP
29dB
CN501
CN502
CN109
CN2001
Q510
Q550
Q610
R2512
R2552
R2612
Q2501 Q2524
Q2541 Q2544
Q2601 Q2504
RY3105
RY3101
RY3103
RY3104
RY3102
CN3003
CN7201
HEADPHONE
JA7201
SPEAKER A
FL/FRch
Cch
SL/SRch
SPEAKER B
PREOUT
FL/FRch
C/SWch
SL/SRch
FAN WATT DET IC115
U-COM
Q107 Q108
Q111 Q112
Q109 Q110
CN104
CN103
CN804
S det IC851
S-yes
S-no
IC852
GND TC4053 (1/3)
H. P. F
SYNC-yes
SYNC-no
TC4053 (2/3) IC852
CHARA-no
CHARA-yes
TC4053 (3/3) IC852
NJM2296
IC801
IC802
TC4051 (S1/S2)
+6dB
0dB
DVD/LD
TV/SAT
VCR1
VCR2
VIDEO
VCR1 OUT
VCR2 OUT
MONITOR OUT
GND

3.2 OVERALL WIRING CONNECTION DIAGRAM



Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".

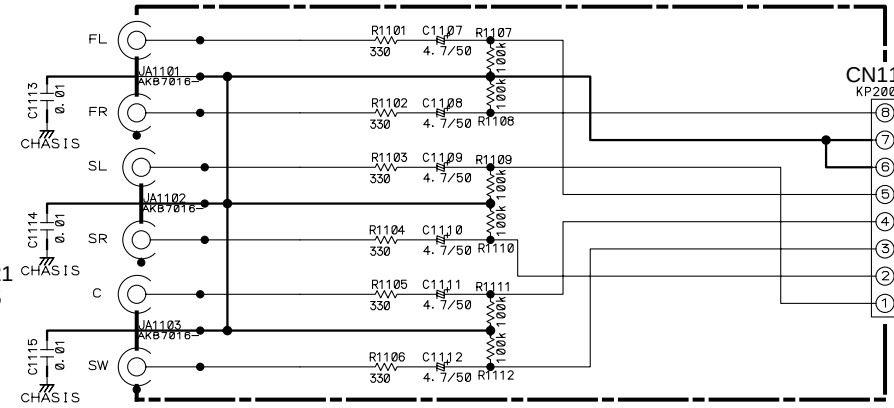


3.3 EXTRA-5.1 (EXTERNAL IN), A-PINJACK and CONNECTION ASSYS

A

EXTRA-5.1 ASSY
(VSX-29TX : AWX7314)
EXTERNAL IN ASSY
(OTHERS : AWX7398)

JA1101-JA1103 ;
VSX-29TX : AKB7121
OTHERS : AKB7095

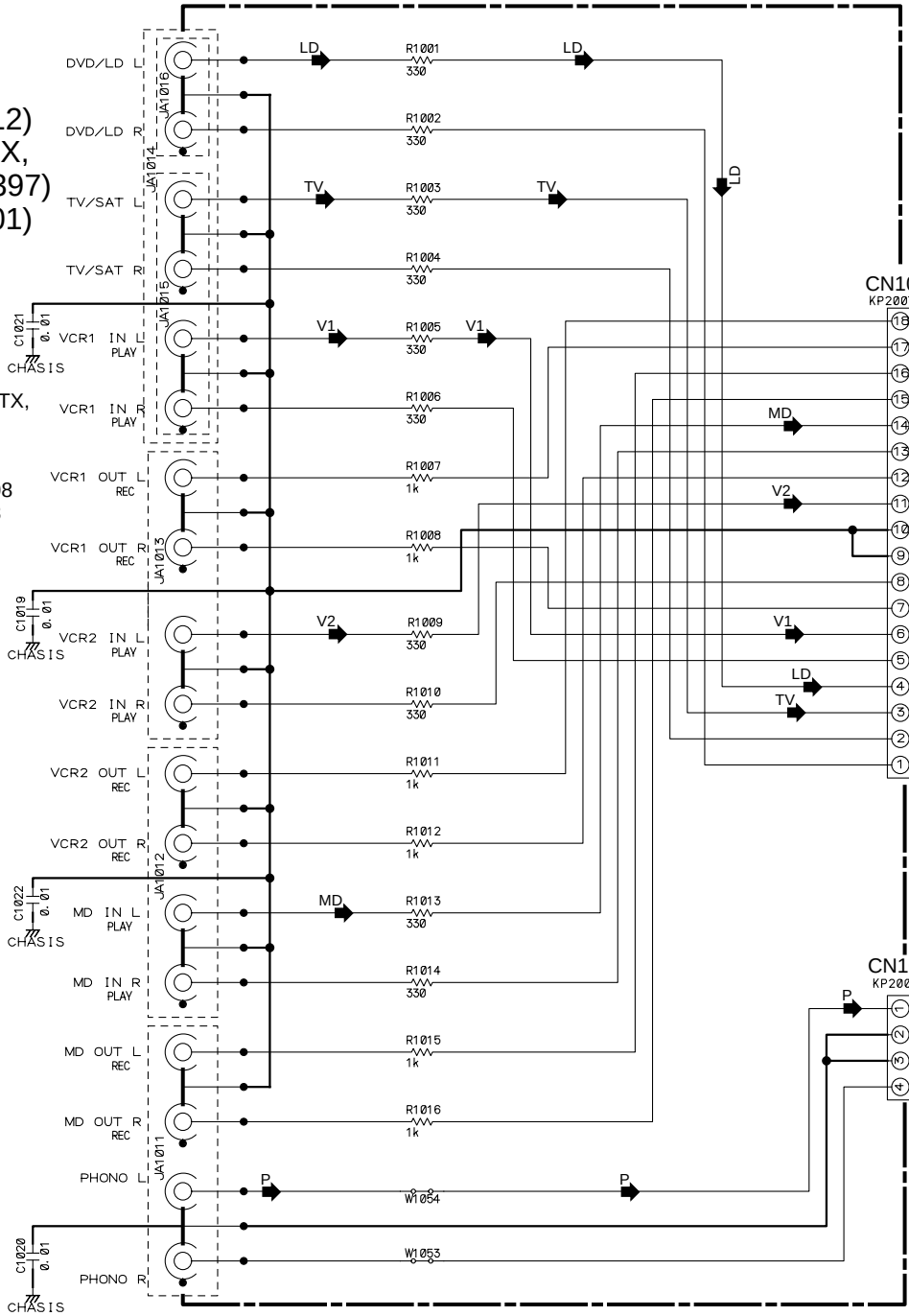


B

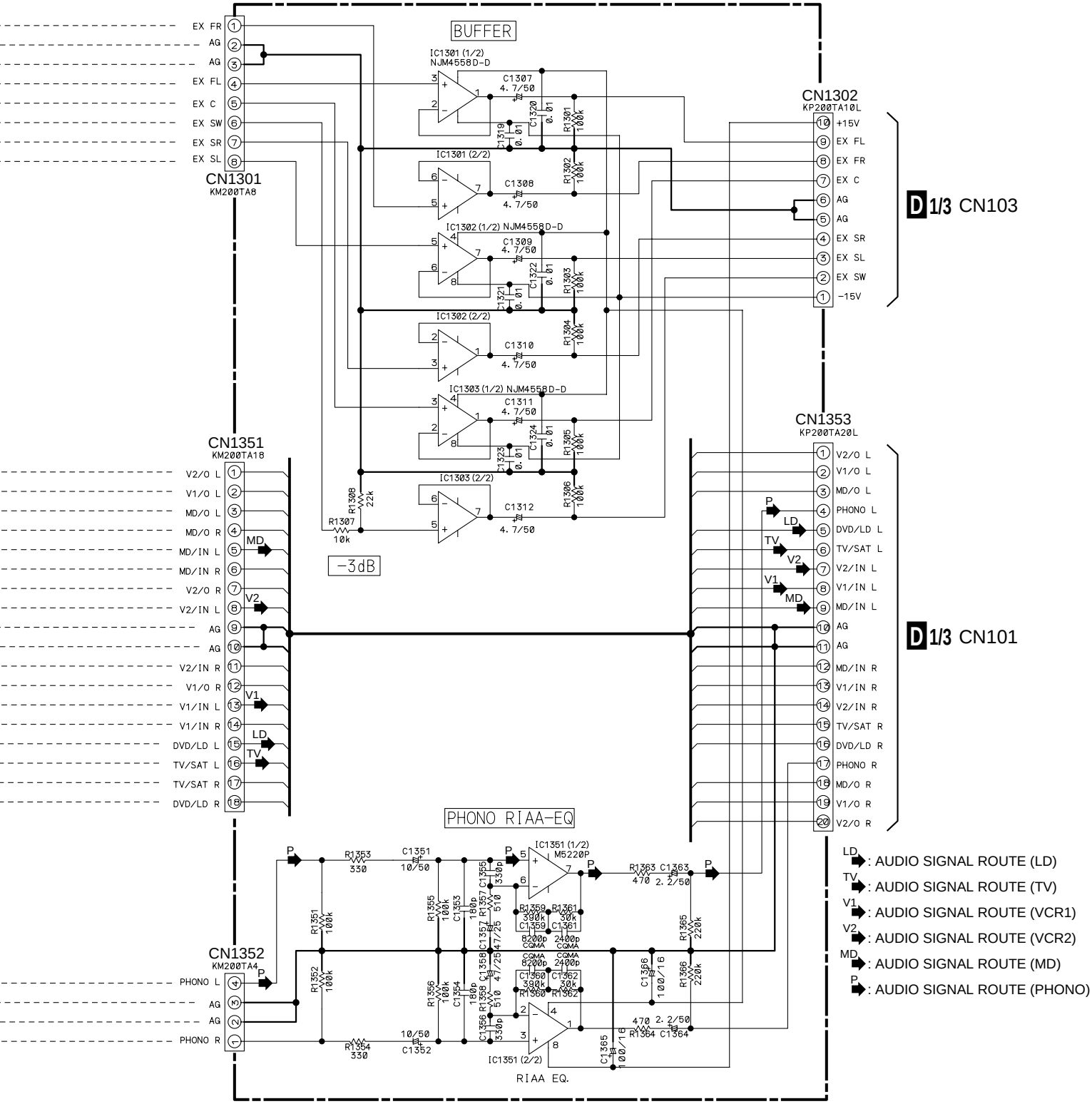
A-PINJACK ASSY
(VSX-29TX : AWX7312)
(VSX-27TX, VSX-26TX,
VSX-D908S : AWX7397)
(VSX-24TX : AWX7401)

CN1014: AKB7108
(VSX-29TX ONLY)
JA1014: AKB7050
(VSX-24TX ONLY)
JA1015: AKB7048
JA1016: AKB7120
(VSX-27TX, VSX-26TX,
VSX-D908S ONLY)

JA1011-JA1013 ;
VSX-29TX : AKB7108
OTHERS : AKB7048



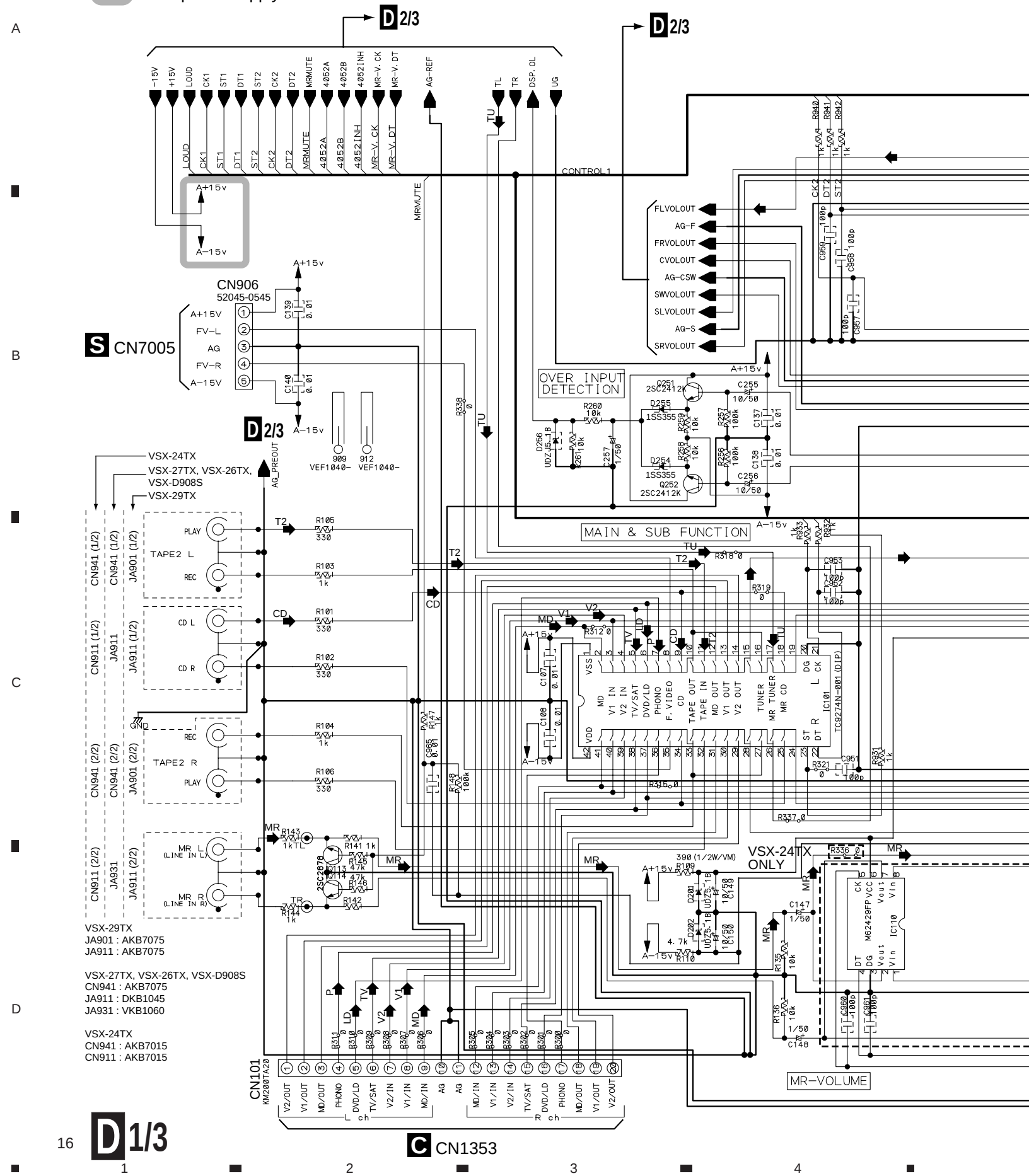
C CONNECTION ASSY (AWX7313)



LD : AUDIO SIGNAL ROUTE (LD)
TV : AUDIO SIGNAL ROUTE (TV)
V1 : AUDIO SIGNAL ROUTE (VCR1)
V2 : AUDIO SIGNAL ROUTE (VCR2)
MD : AUDIO SIGNAL ROUTE (MD)
P : AUDIO SIGNAL ROUTE (PHONO)

3.4 MAIN CONTROL ASSY (1/3)

: The power supply is shown with the marked box.



VSX-29TX
JA901 : AKB7075
JA911 : AKB7075

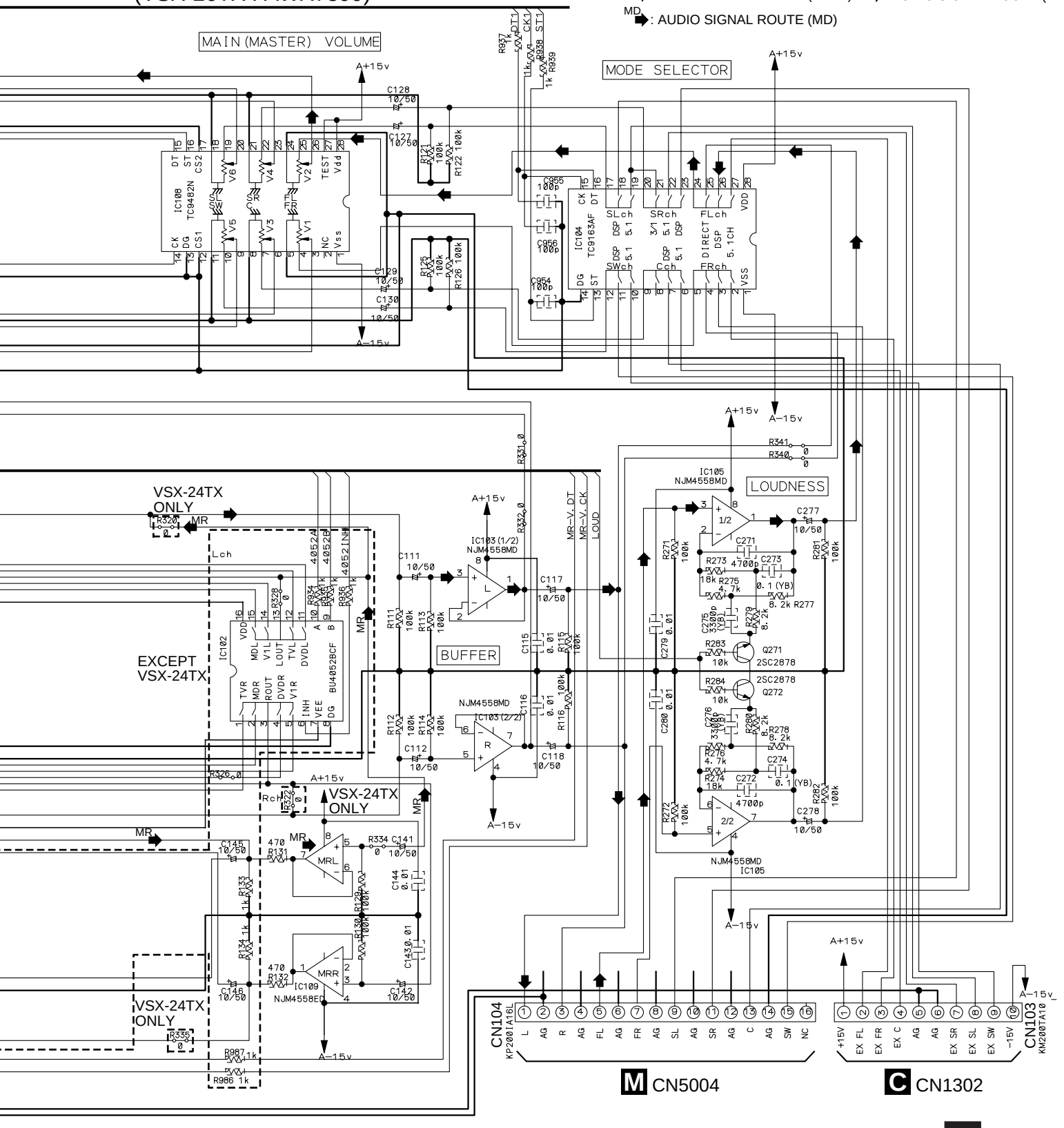
VSX-27TX, VSX-26TX, VSX-D908S
CN941 : AKB7075
JA911 : DKB1045
JA931 : VKB1060

VSX-24TX
CN941 : AKB7015
CN911 : AKB7015

D 1/3

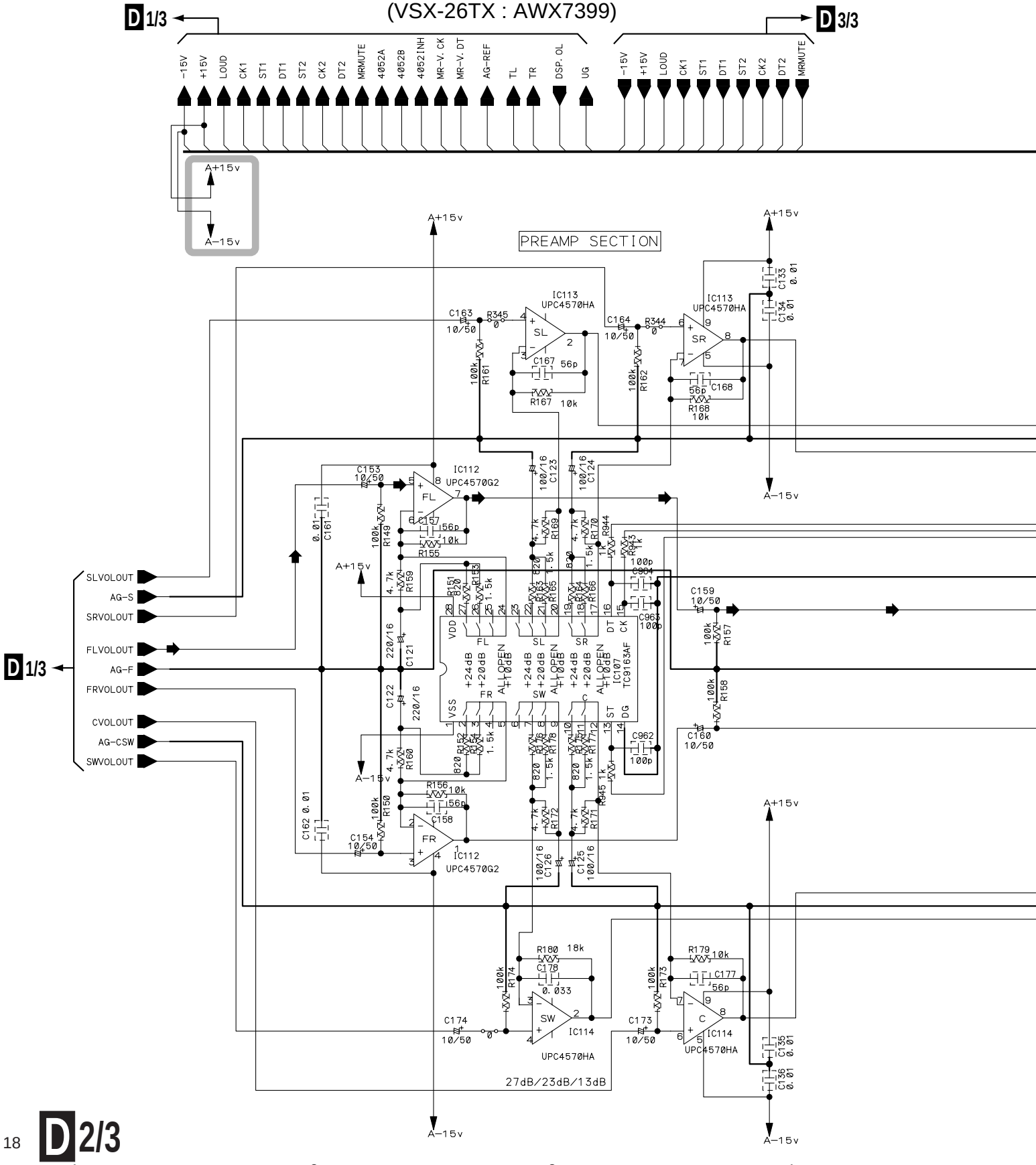
MAIN CONTROL ASSY
(VSX-29TX : AWX7306)(VSX-24TX : AWX7406)
(VSX-27TX : AWX7393)(VSX-D908S : AWX7424)
(VSX-26TX : AWX7399)

: AUDIO SIGNAL ROUTE
LD : AUDIO SIGNAL ROUTE (LD)
TV : AUDIO SIGNAL ROUTE (TV)
V1 : AUDIO SIGNAL ROUTE (VCR1)
V2 : AUDIO SIGNAL ROUTE (VCR2)
MD : AUDIO SIGNAL ROUTE (MD)
P : AUDIO SIGNAL ROUTE (PHONO)
TU : AUDIO SIGNAL ROUTE (TUNER)
CD : AUDIO SIGNAL ROUTE (CD)
T2 : AUDIO SIGNAL ROUTE (TAPE2)
MR : AUDIO SIGNAL ROUTE (MR)



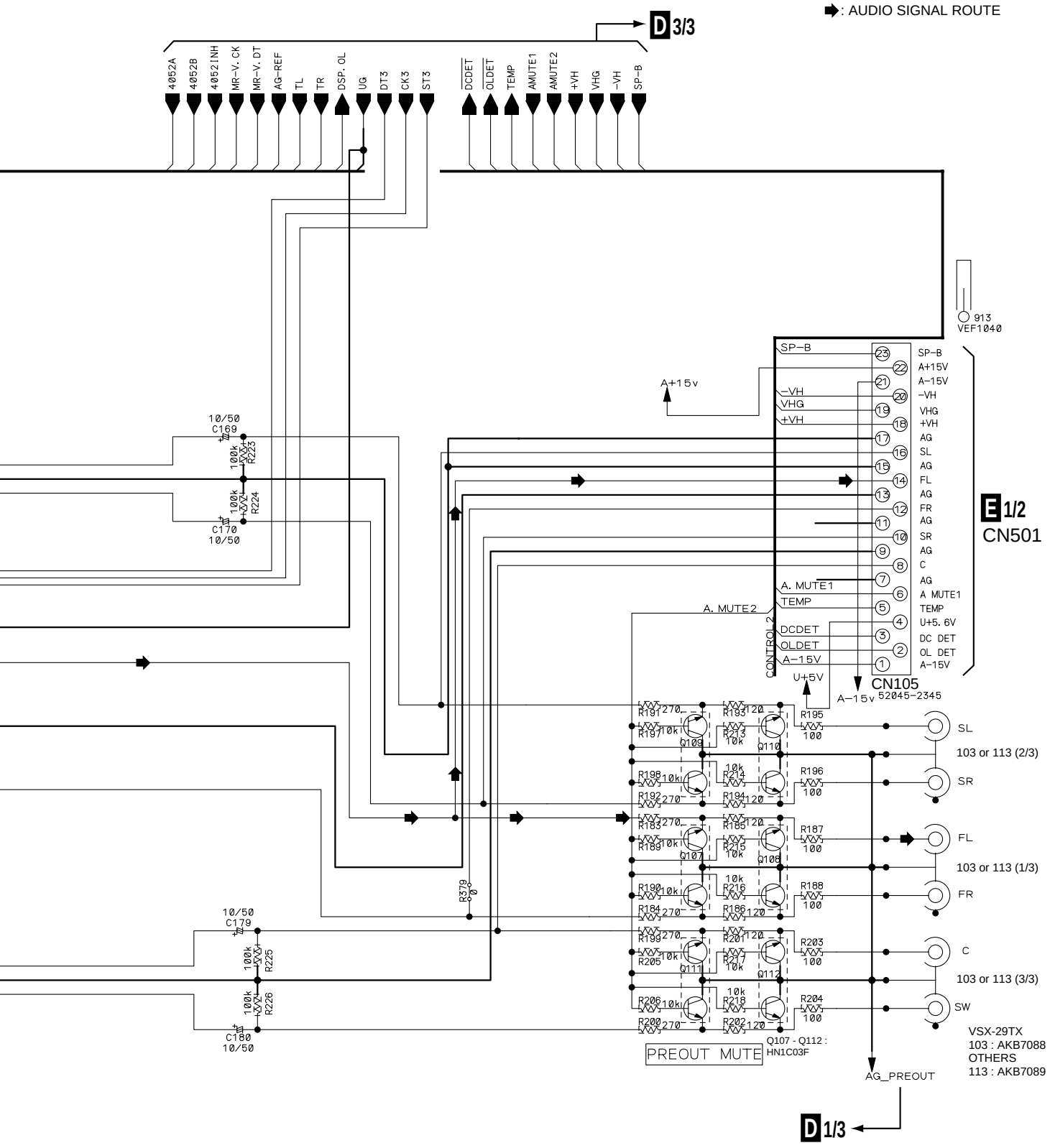
3.5 MAIN CONTROL ASSY (2/3)

D 2/3 MAIN CONTROL ASSY
(VSX-29TX : AWX7306)(VSX-24TX : AWX7406)
(VSX-27TX : AWX7393)(VSX-D908S : AWX7424)
(VSX-26TX : AWX7399)

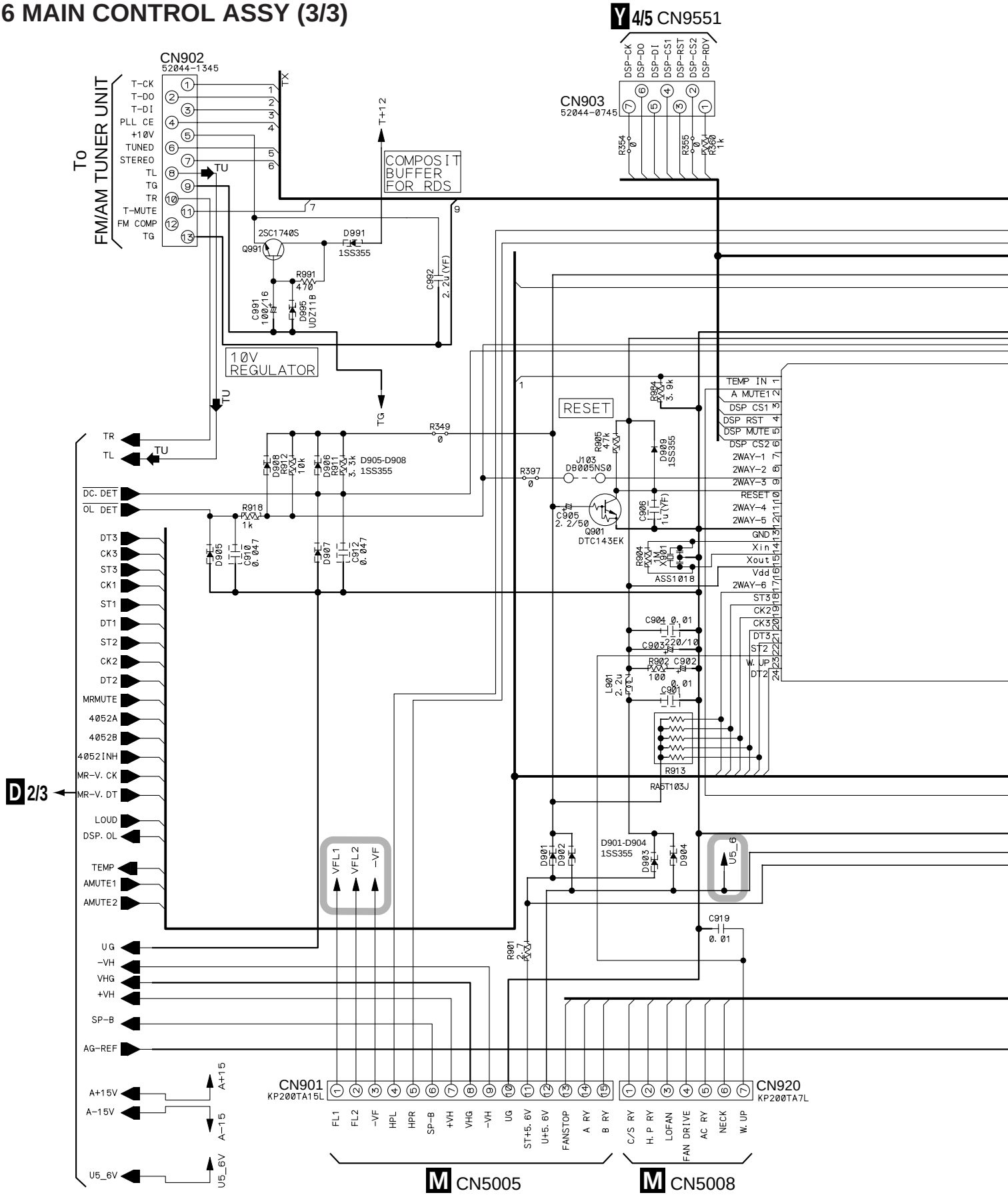


: The power supply is shown with the marked box.

: AUDIO SIGNAL ROUTE



3.6 MAIN CONTROL ASSY (3/3)

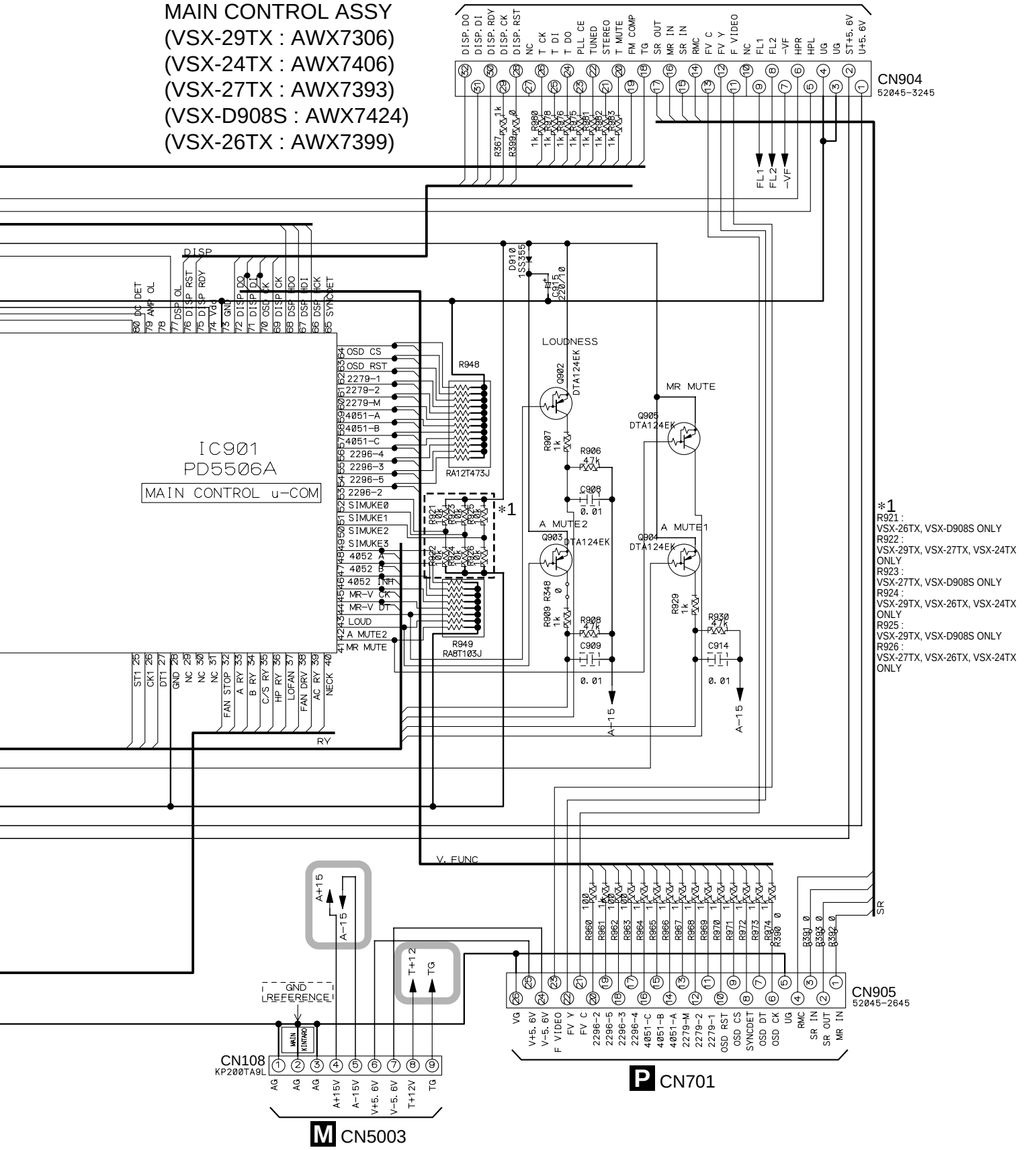


: The power supply is shown with the marked box.

TU : AUDIO SIGNAL ROUTE (TUNER)

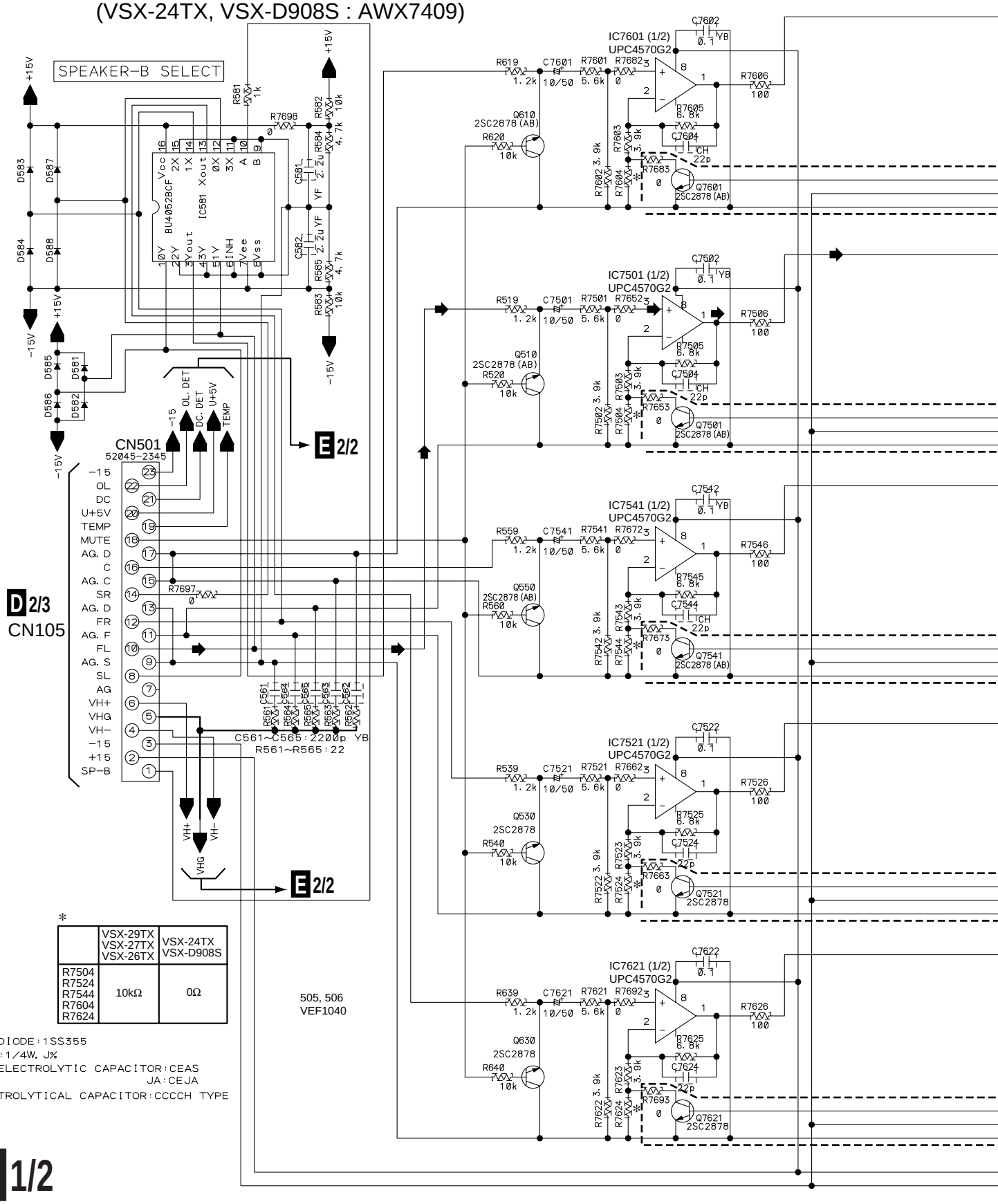
D 3/3

MAIN CONTROL ASSY
(VSX-29TX : AWX7306)
(VSX-24TX : AWX7406)
(VSX-27TX : AWX7393)
(VSX-D908S : AWX7424)
(VSX-26TX : AWX7399)



3.7 V-AMP ASSY (1/2)

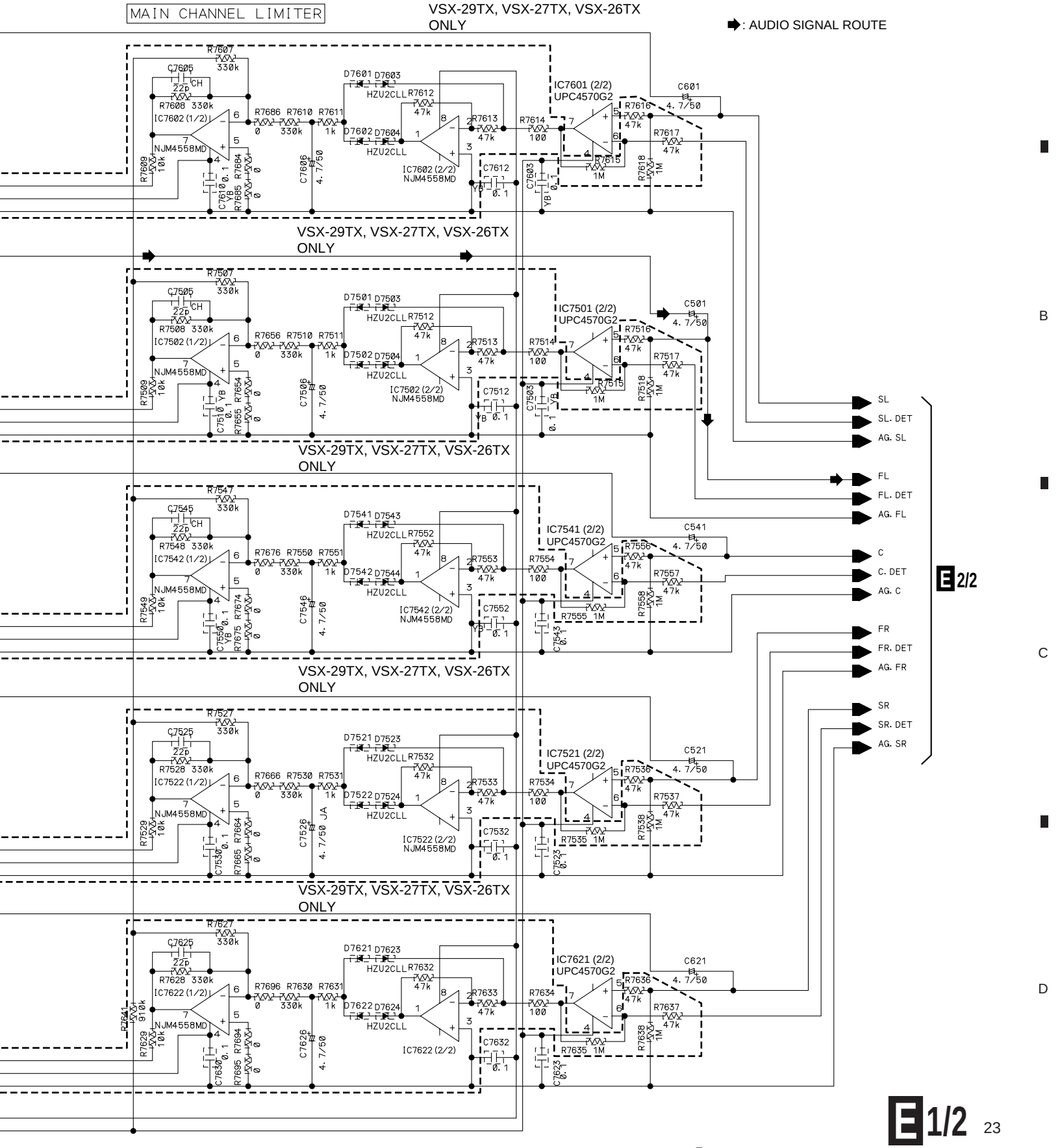
E 1/2 V-AMP ASSY
(VSX-29TX, VSX-27TX, VSX-26TX : AWX7309)
(VSX-24TX, VSX-D908S : AWX7409)



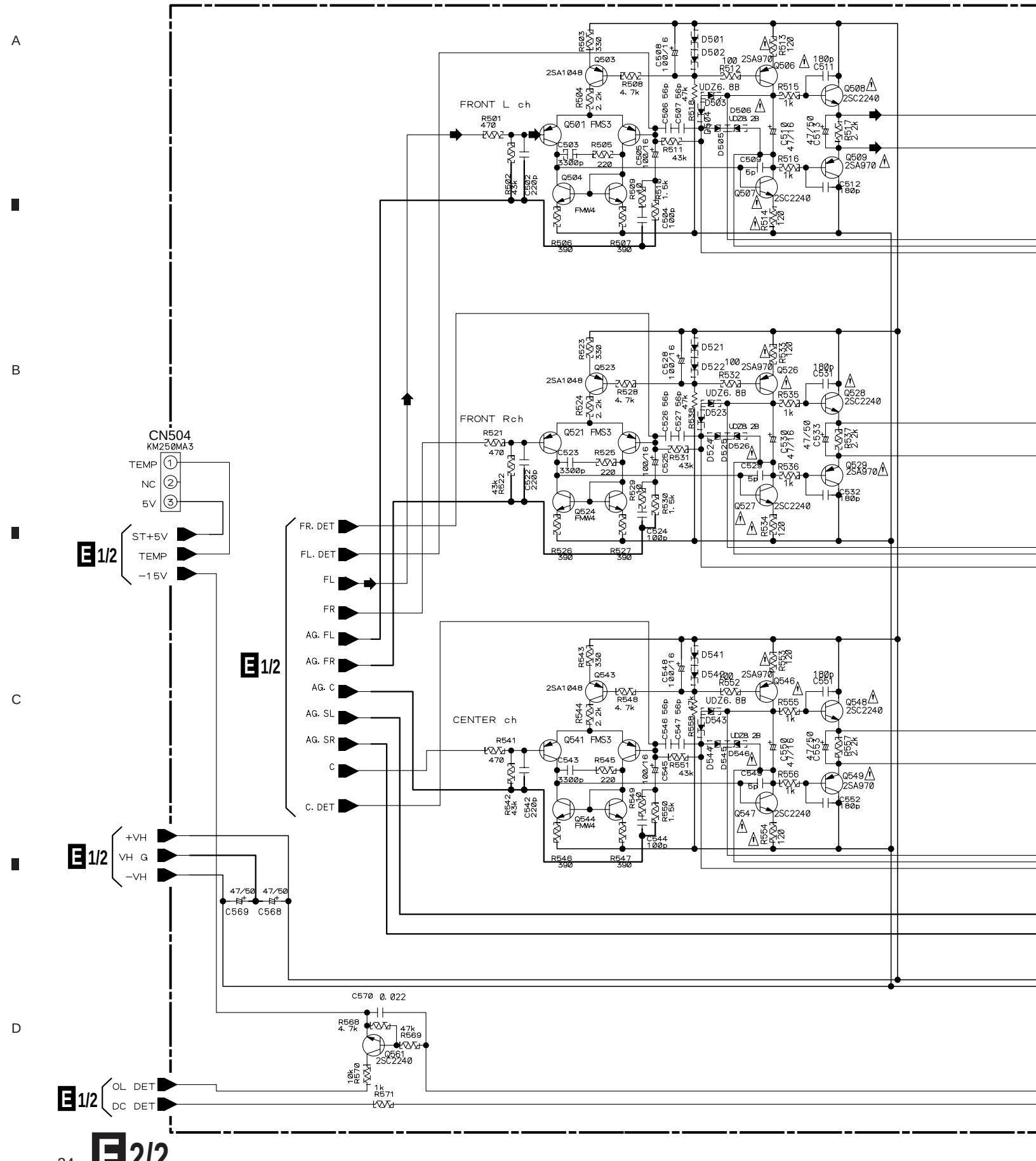
*

	VSX-29TX VSX-27TX VSX-26TX	VSX-24TX VSX-D908S
R7504 R7524 R7544 R7604 R7624	10kΩ	0Ω

·NO MARK DIODE : 1SS355
·RESISTOR : 1/4W, J%
·NO MARK ELECTROLYTIC CAPACITOR : CEAS
JA : CEJA
·NON ELECTROLYTICAL CAPACITOR : CCCCH TYPE


MAIN CHANNEL LIMITER
VSX-29TX, VSX-27TX, VSX-26TX ONLY
: AUDIO SIGNAL ROUTE
IC7602 (1/2) NJM4558MD
IC7602 (2/2) NJM4558MD
IC7601 (2/2) UPC4570G2
IC7502 (1/2) NJM4558MD
IC7502 (2/2) NJM4558MD
IC7501 (2/2) UPC4570G2
IC7542 (1/2) NJM4558MD
IC7542 (2/2) NJM4558MD
IC7541 (2/2) UPC4570G2
IC7522 (1/2) NJM4558MD
IC7522 (2/2) NJM4558MD
IC7521 (2/2) UPC4570G2
IC7622 (1/2) NJM4558MD
IC7622 (2/2)
IC7621 (2/2) UPC4570G2
SL
SL. DET
AG. SL
FL
FL. DET
AG. FL
C
C. DET
AG. C
FR
FR. DET
AG. FR
SR
SR. DET
AG. SR
E 2/2

3.8 V-AMP ASSY (2/2)



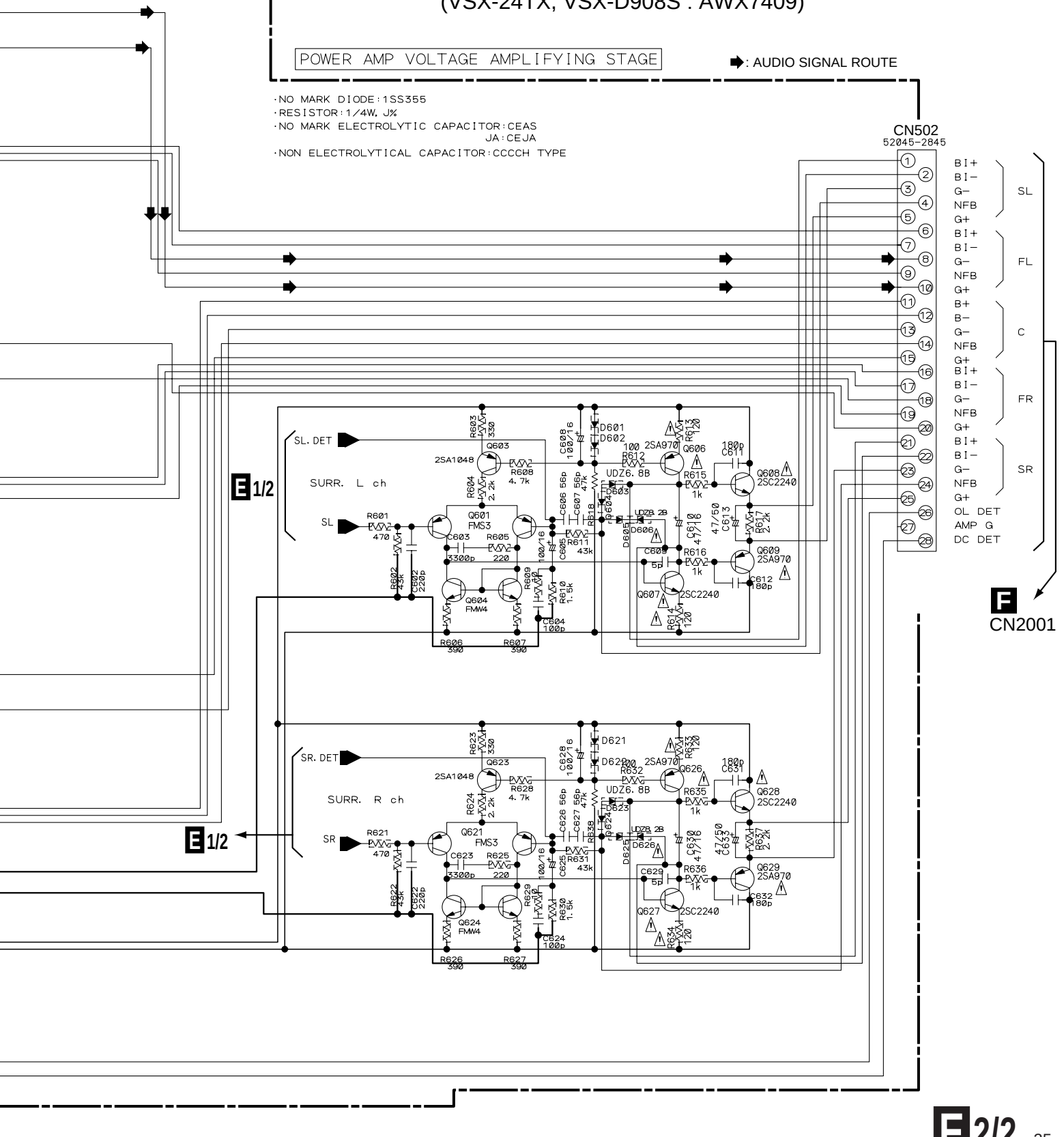
E 2/2 V-AMP ASSY

(VSX-29TX, VSX-27TX, VSX-26TX : AWX7309)
(VSX-24TX, VSX-D908S : AWX7409)

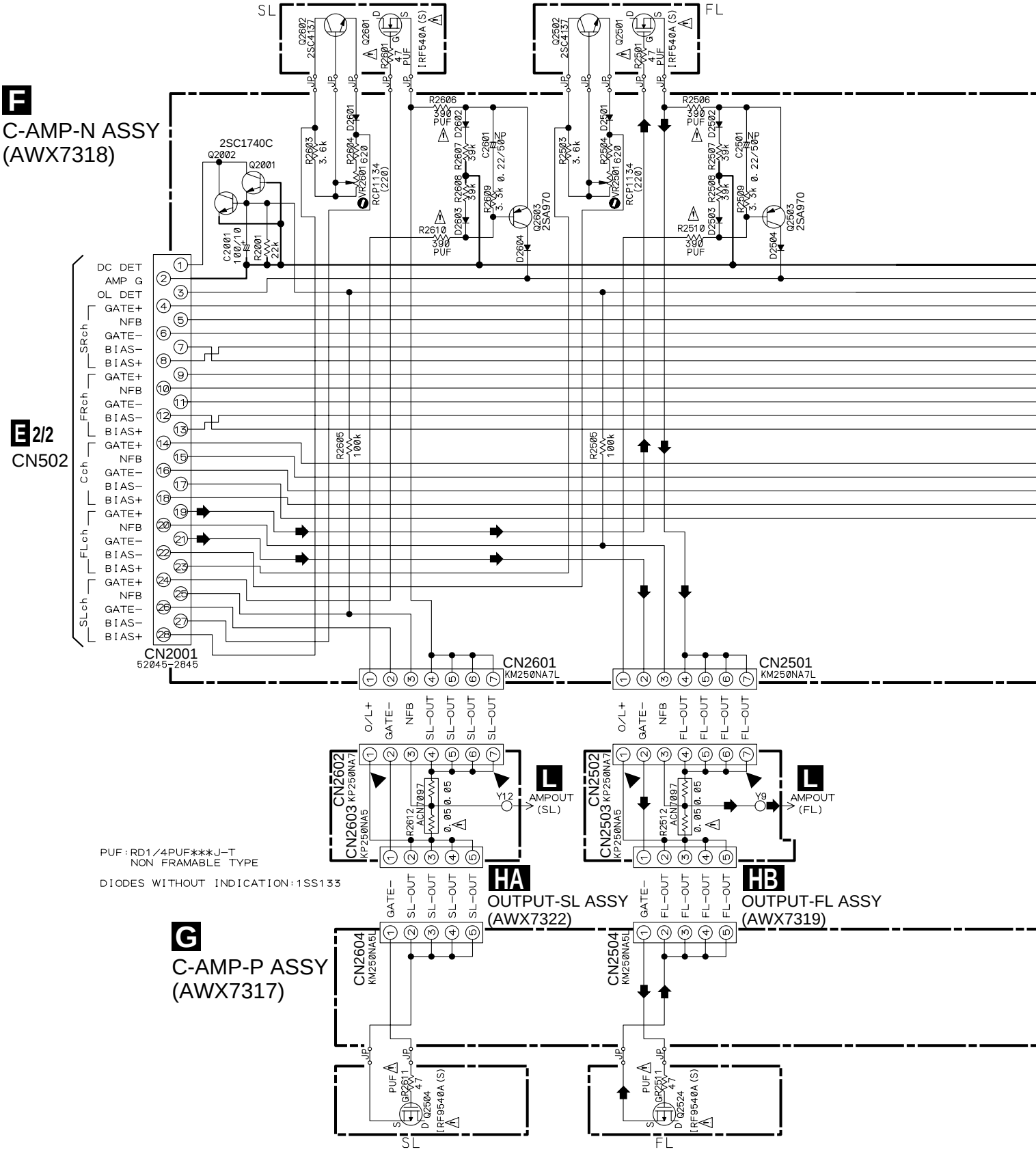
POWER AMP VOLTAGE AMPLIFYING STAGE

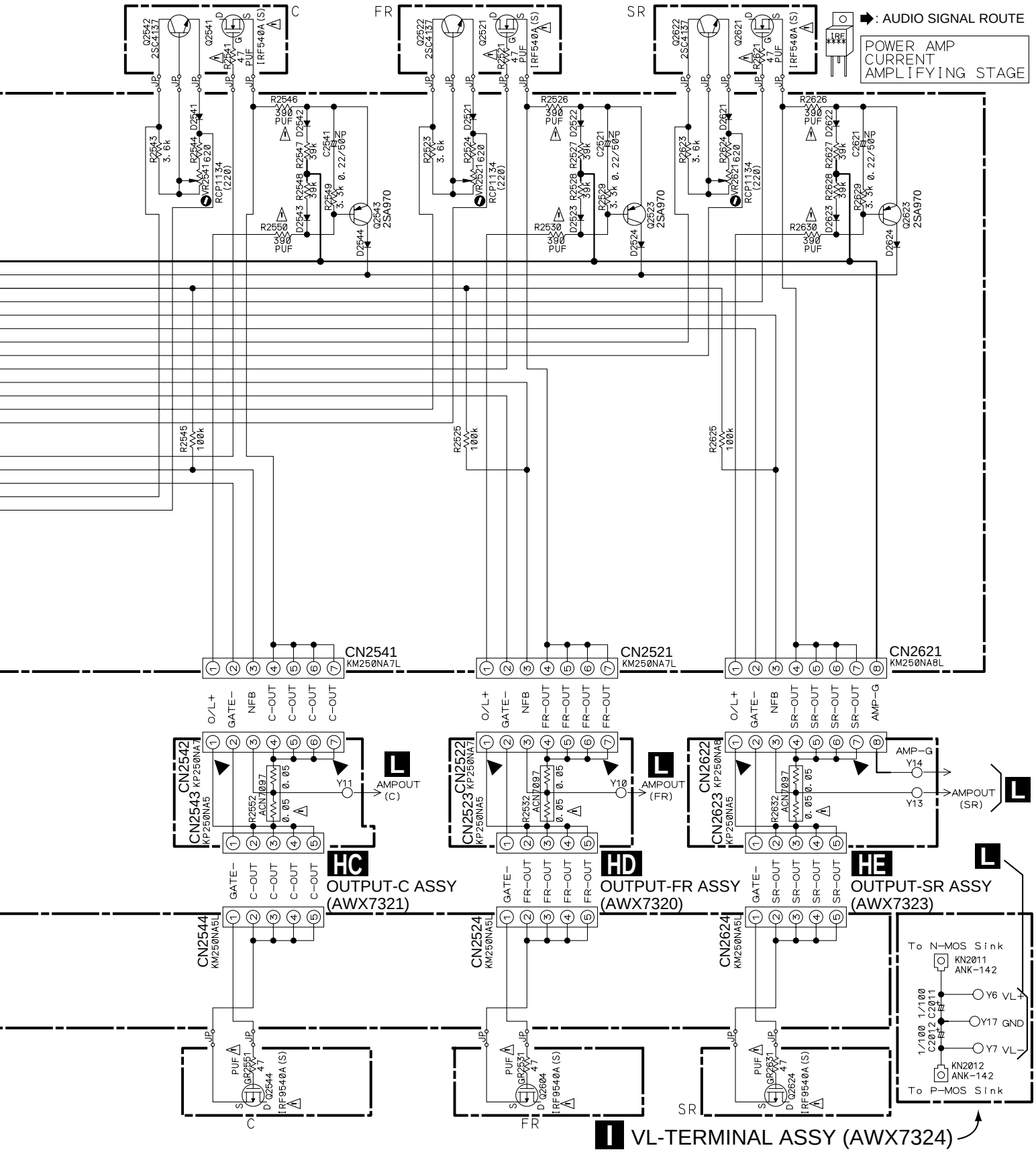
: AUDIO SIGNAL ROUTE

·NO MARK DIODE : 1SS355
·RESISTOR : 1/4W, J%
·NO MARK ELECTROLYTIC CAPACITOR : CEAS
JA : CEJA
·NON ELECTROLYTICAL CAPACITOR : CCCCH TYPE

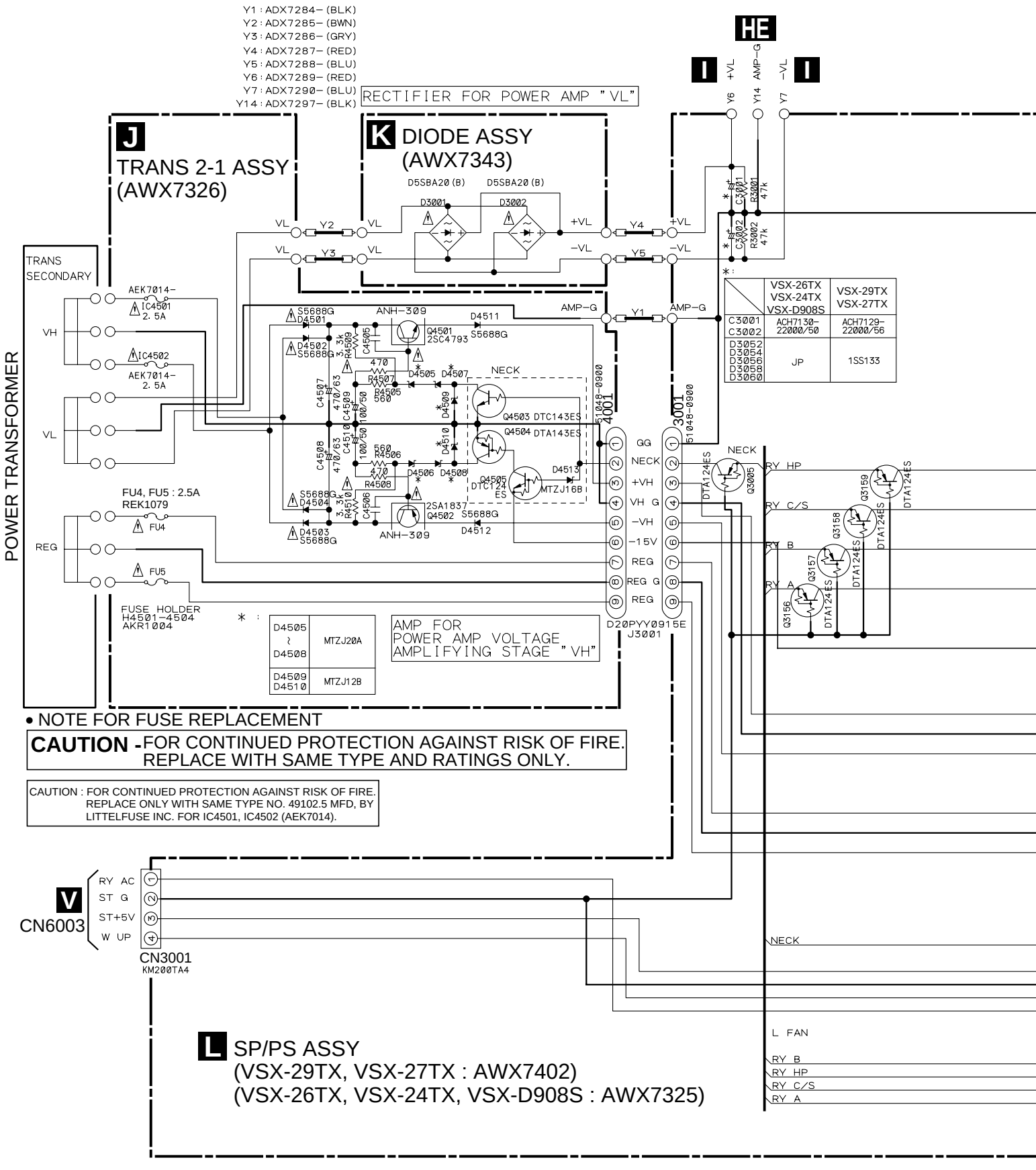


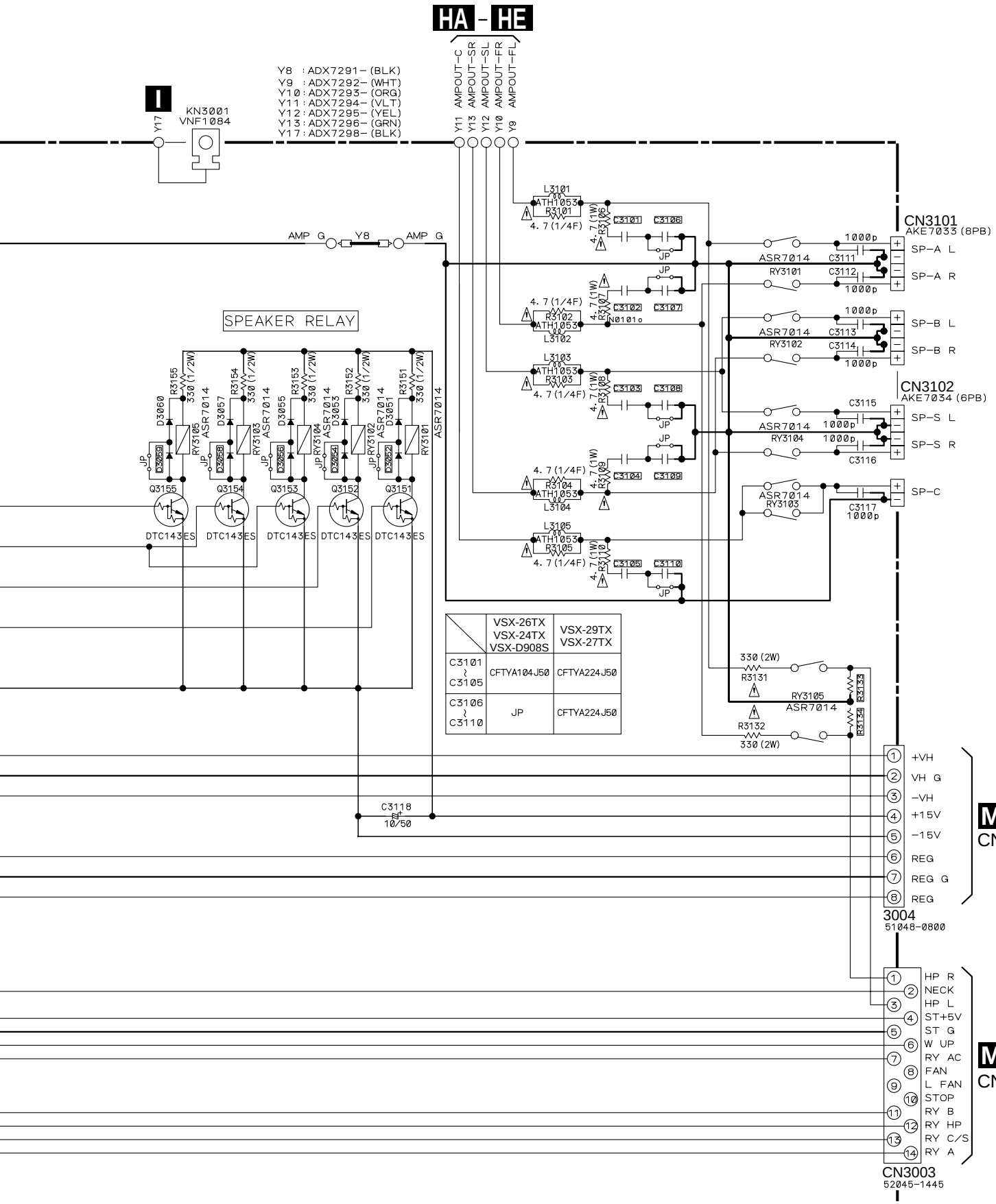
3.9 C-AMP-N, C-AMP-P, OUTPUT-SL, OUTPUT-FL, OUTPUT-C, OUTPUT-FR, OUTPUT-SR and VL-TERMINAL ASSYS



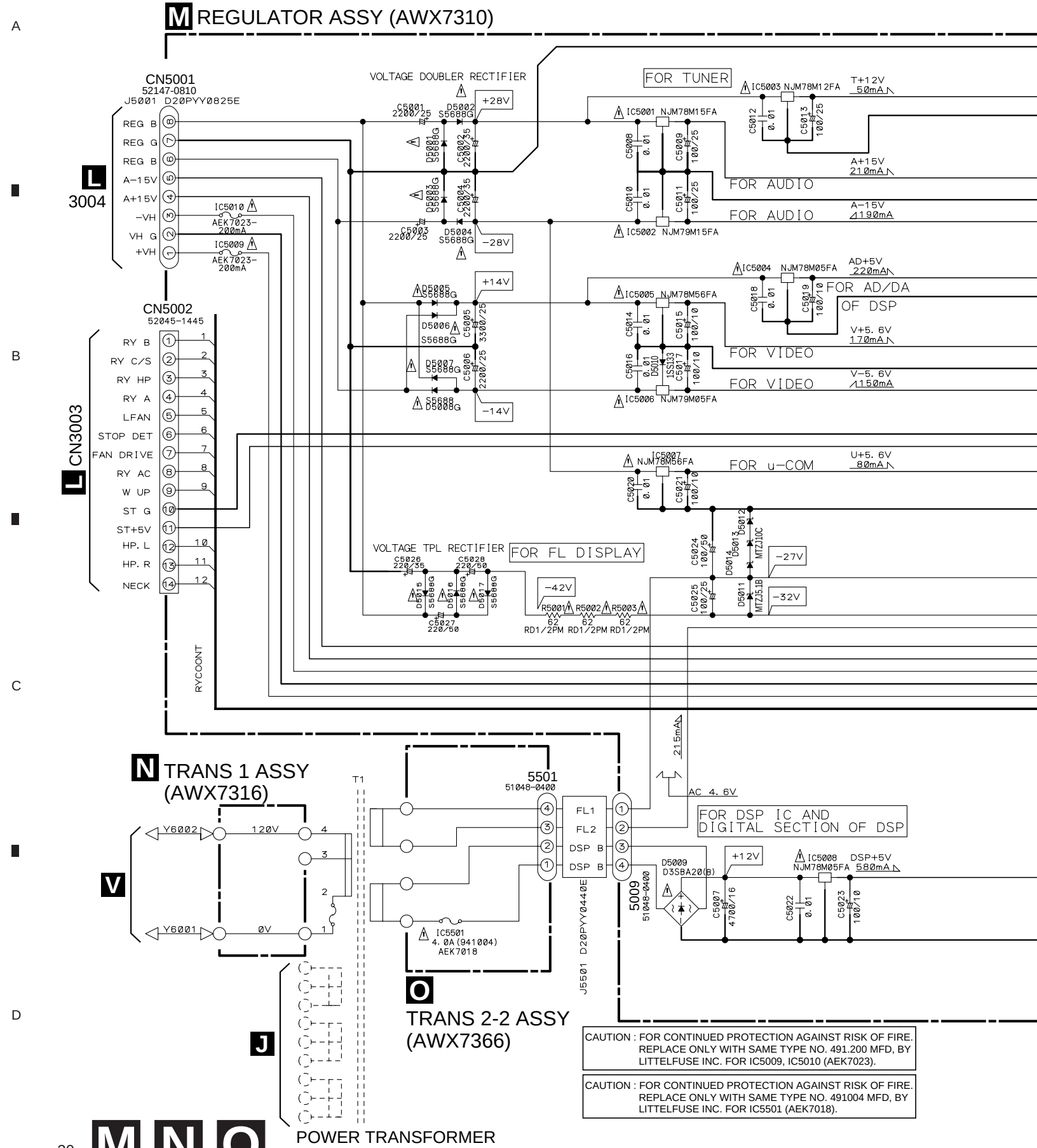

: AUDIO SIGNAL ROUTE
POWER AMP CURRENT AMPLIFYING STAGE
C
FR
SR
CN2541 KM250NA7L
CN2521 KM250NA7L
CN2621 KM250NA8L
CN2542 KP250NA7
CN2543 KP250NA5
CN2522 KP250NA7
CN2523 KP250NA5
CN2622 KP250NA8
CN2623 KP250NA5
CN2544 KM250NA5L
CN2524 KM250NA5L
CN2624 KM250NA5L
HC OUTPUT-C ASSY (AWX7321)
HD OUTPUT-FR ASSY (AWX7320)
HE OUTPUT-SR ASSY (AWX7323)
AMPOUT (C)
AMPOUT (FR)
AMPOUT (SR)
To N-MOS Sink
To P-MOS Sink
KN2011 ANK-142
KN2012 ANK-142
I VL-TERMINAL ASSY (AWX7324)

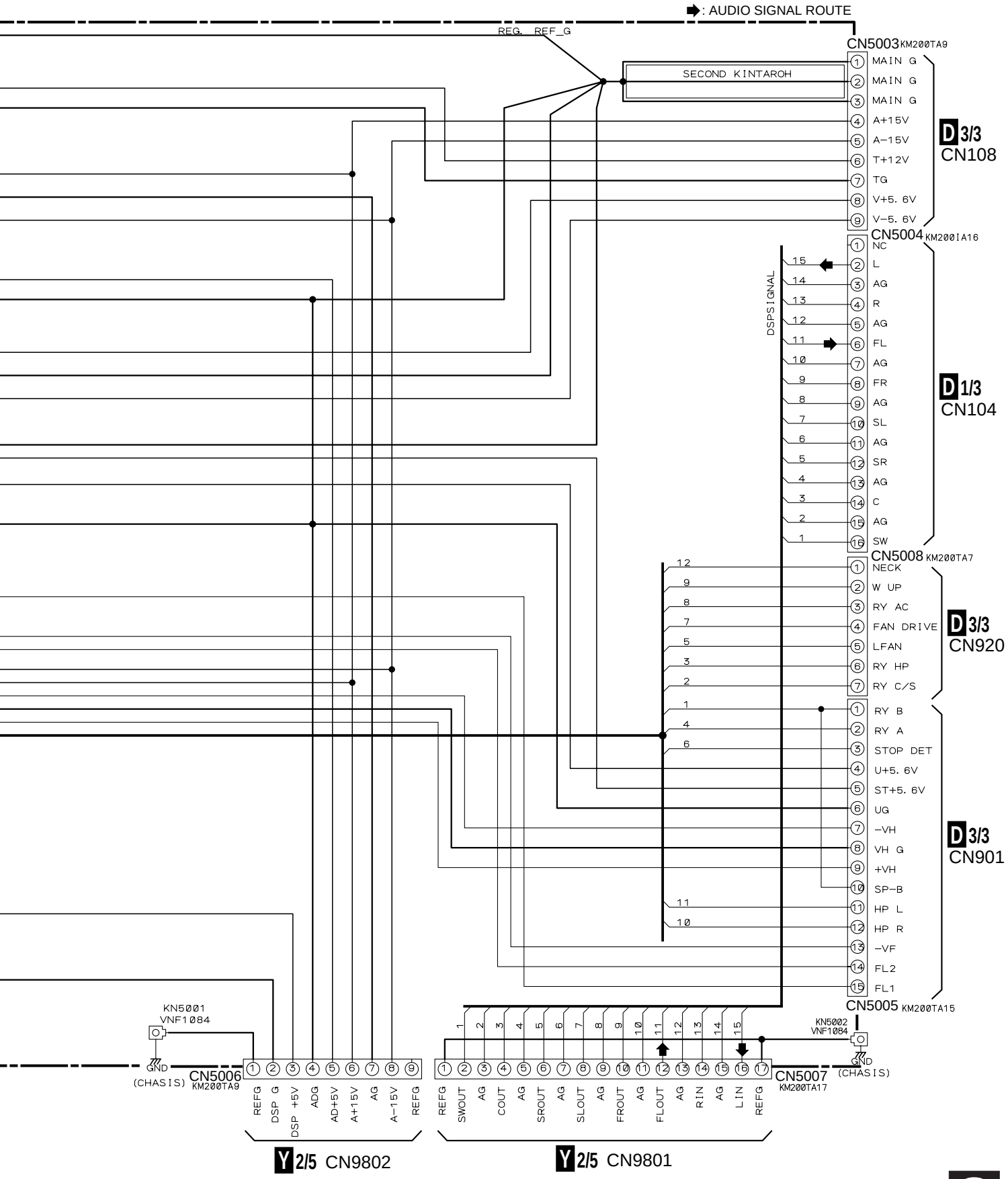
3.10 TRANS 2-1, DIODE and SP/PS ASSYS




HA - HE
Y8 : ADX7291-(BLK)
Y9 : ADX7292-(WHT)
Y10 : ADX7293-(ORG)
Y11 : ADX7294-(VLT)
Y12 : ADX7295-(YEL)
Y13 : ADX7296-(GRN)
Y17 : ADX7298-(BLK)
I
KN3001
VNF1084
Y17
Y11 AMPOUT-C
Y13 AMPOUT-SR
Y12 AMPOUT-SL
Y10 AMPOUT-FR
Y9 AMPOUT-FL
AMP G
Y8
AMP G
SPEAKER RELAY
CN3101
AKE7033 (8PB)
SP-A L
SP-A R
SP-B L
SP-B R
CN3102
AKE7034 (6PB)
SP-S L
SP-S R
SP-C
ASR7014
RY3101
RY3102
RY3104
RY3103
RY3105
DTC143ES
Q3155
Q3154
Q3153
Q3152
Q3151
C3118
10/50
VSX-26TX VSX-24TX VSX-D908S
VSX-29TX VSX-27TX
C3101 ~ C3105
CFTYA104J50
CFTYA224J50
C3106 ~ C3110
JP
CFTYA224J50
+VH
VH G
-VH
+15V
-15V
REG
REG G
REG
M
CN5001
3004
51048-0800
HP R
NECK
HP L
ST+5V
ST G
W UP
RY AC
FAN
L FAN
STOP
RY B
RY HP
RY C/S
RY A
M
CN5002
CN3003
52045-1445

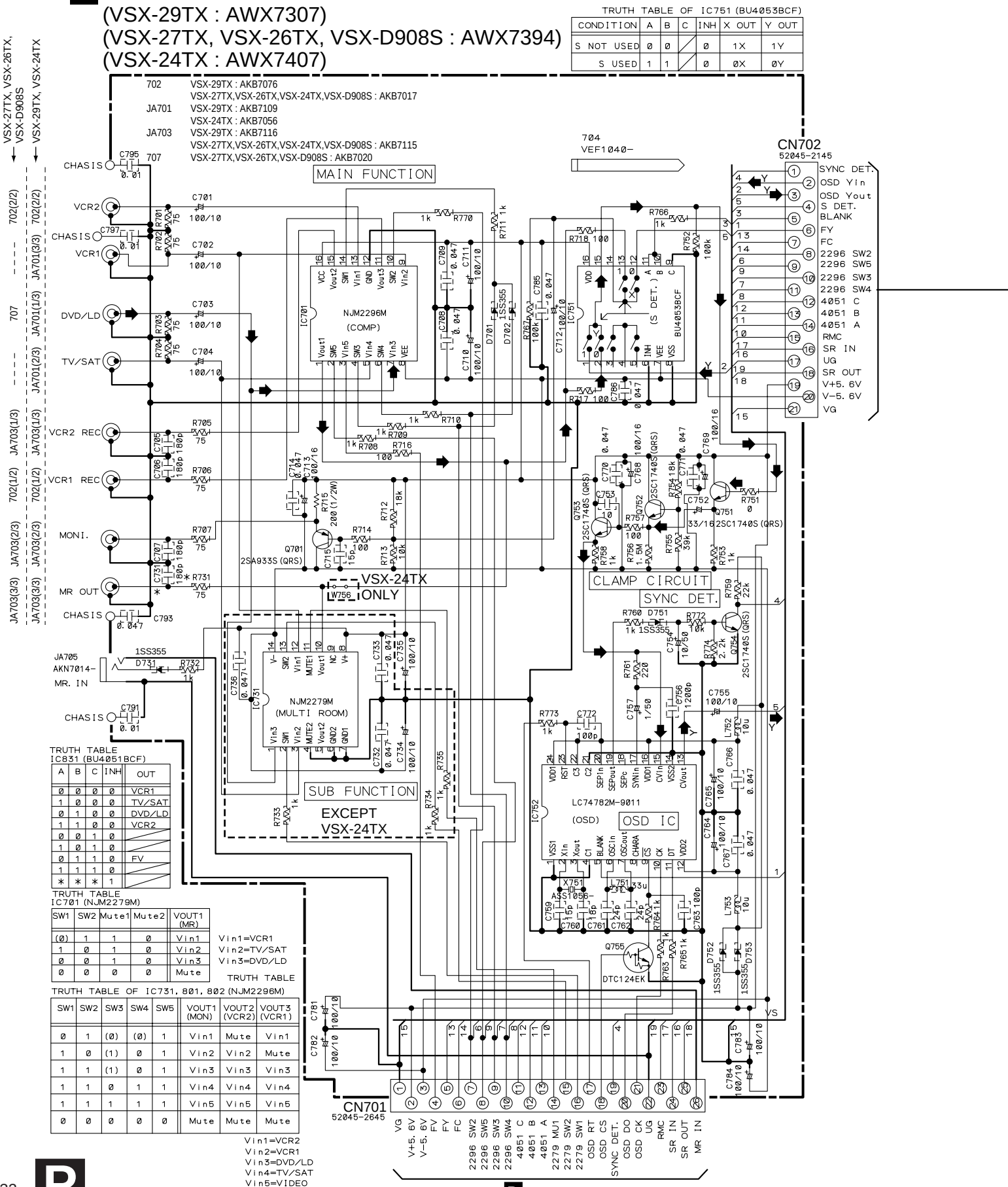
3.11 REGULATOR, TRANS 1 and TRANS 2-2 ASSYS



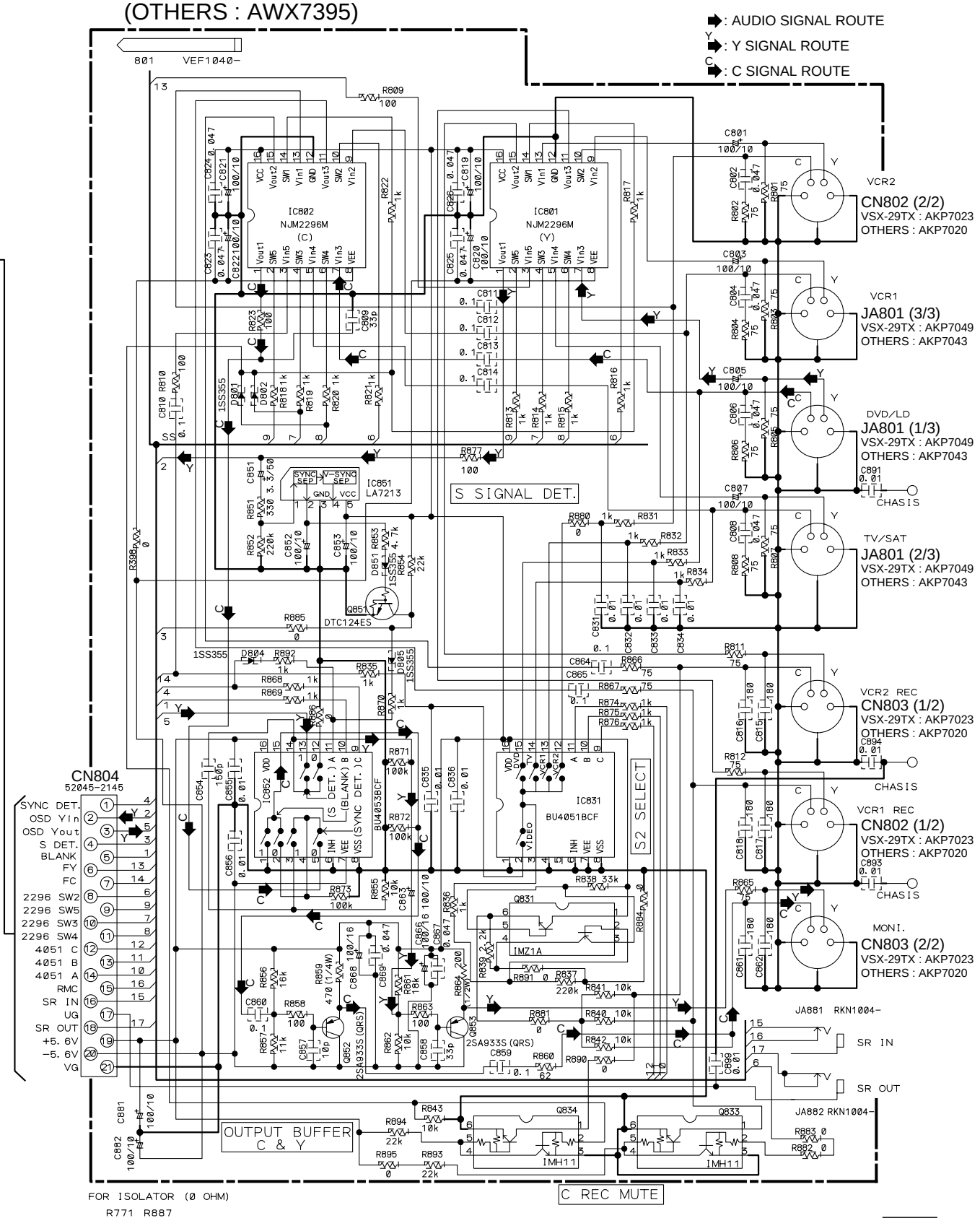

: AUDIO SIGNAL ROUTE
REG. REF_G
SECOND KINTAROH
CN5003 KM200TA9
MAIN G
MAIN G
MAIN G
A+15V
A−15V
T+12V
TG
V+5. 6V
V−5. 6V
D 3/3
CN108
CN5004 KM200IA16
NC
L
AG
R
AG
FL
AG
FR
AG
SL
AG
SR
AG
C
AG
SW
DSPSIGNAL
D 1/3
CN104
CN5008 KM200TA7
NECK
W UP
RY AC
FAN DRIVE
LFAN
RY HP
RY C/S
D 3/3
CN920
RY B
RY A
STOP DET
U+5. 6V
ST+5. 6V
UG
−VH
VH G
+VH
SP−B
HP L
HP R
−VF
FL2
FL1
D 3/3
CN901
CN5005 KM200TA15
KN5001
VNF1084
GND
(CHASIS)
CN5006
KM200TA9
REFG
DSP G
DSP +5V
ADG
AD+5V
A+15V
AG
A−15V
REFG
Y 2/5 CN9802
REFG
SWOUT
AG
COUT
AG
SROUT
AG
SLOUT
AG
FROUT
AG
FLOUT
AG
RIN
AG
LIN
REFG
Y 2/5 CN9801
CN5007
KM200TA17
KN5002
VNF1084
GND
(CHASIS)

3.12 VIDEO and S-VIDEO ASSYS

P VIDEO ASSY
(VSX-29TX : AWX7307)
(VSX-27TX, VSX-26TX, VSX-D908S : AWX7394)
(VSX-24TX : AWX7407)

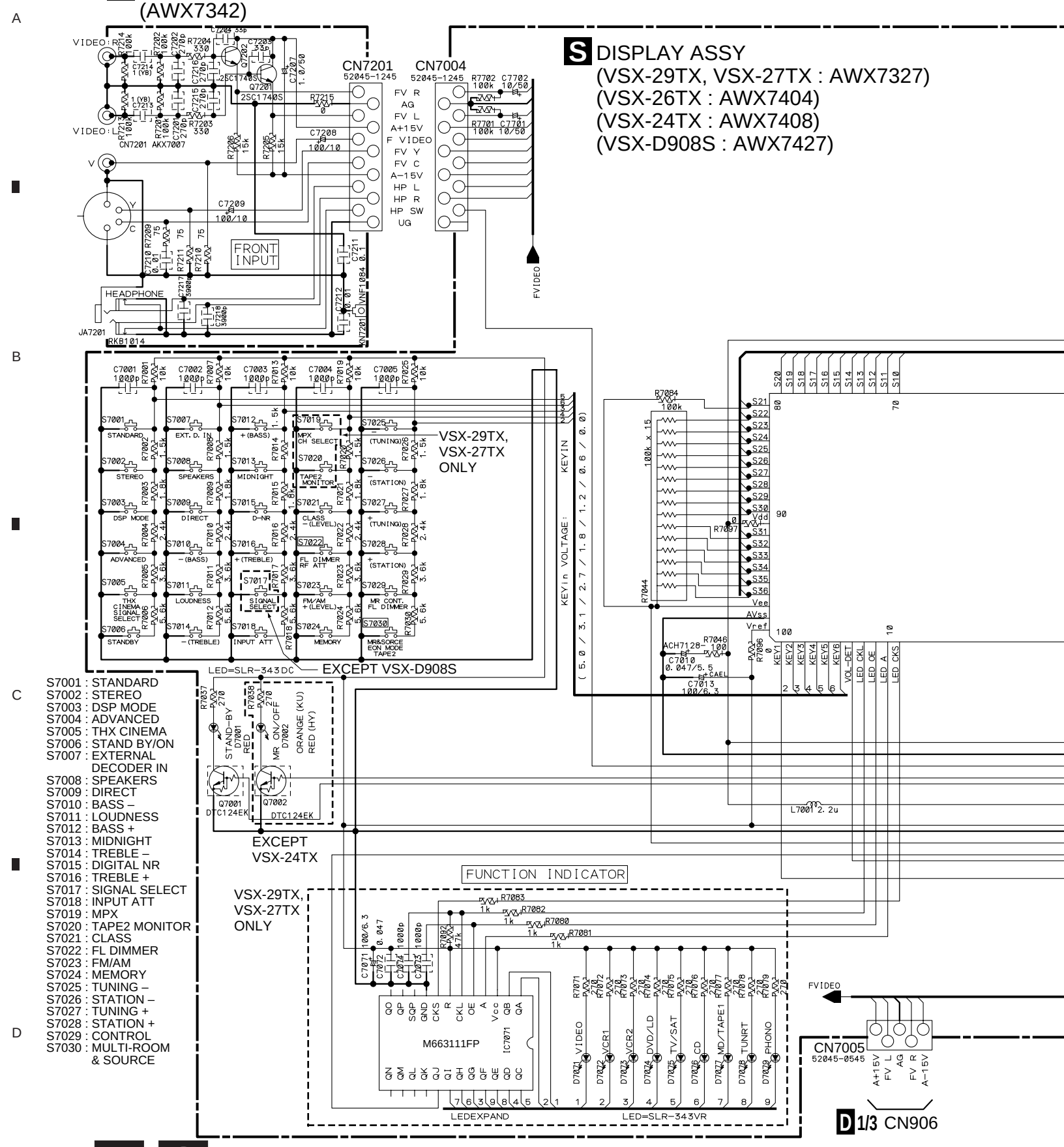


Q S-VIDEO ASSY
(VSX-29TX : AWX7308)
(OTHERS : AWX7395)

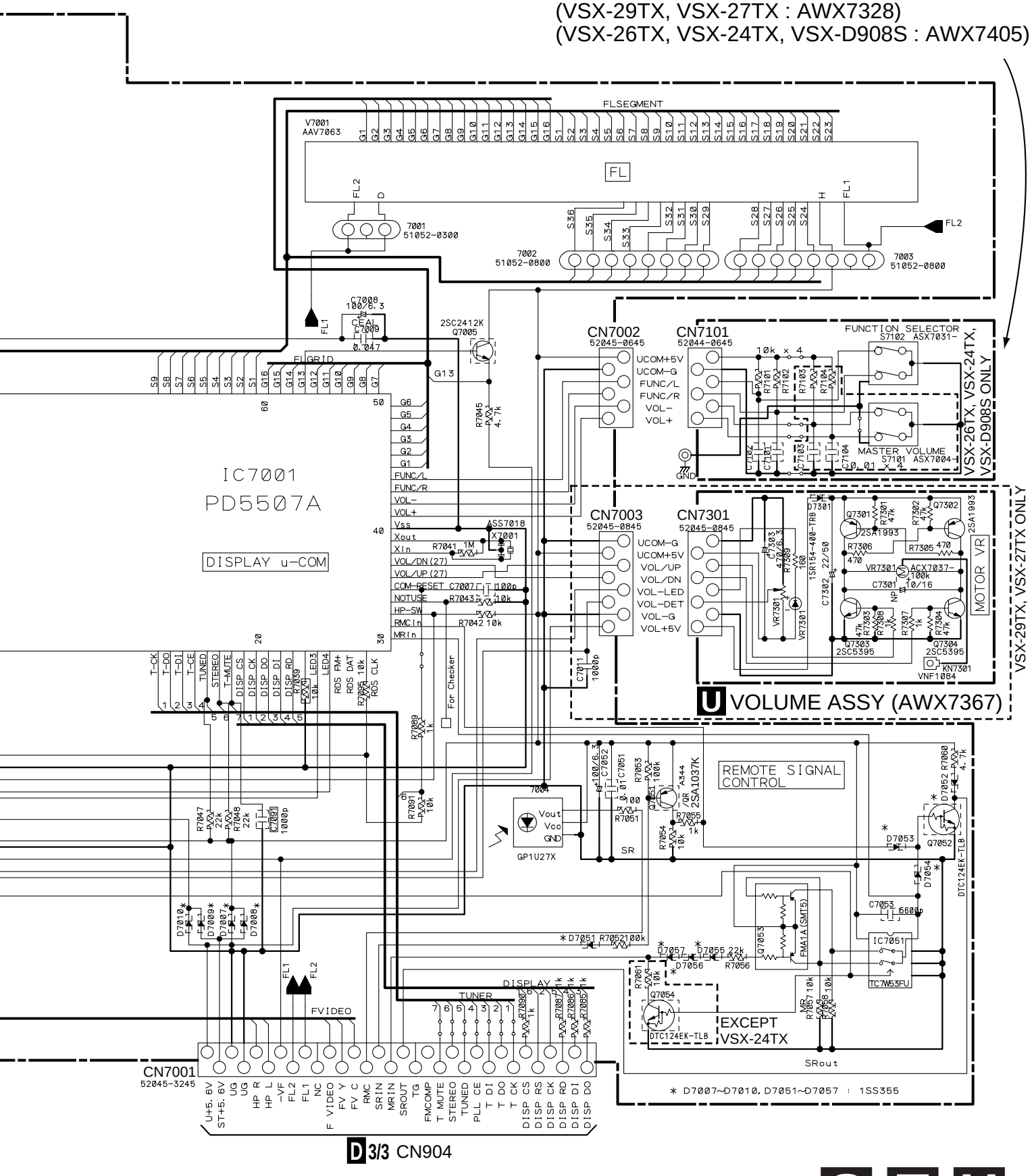


3.13 H. PHONE/F. VIDEO, DISPLAY, ROTARY ENCODER and VOLUME ASSYS

R H. PHONE/F. VIDEO ASSY (AWX7342)

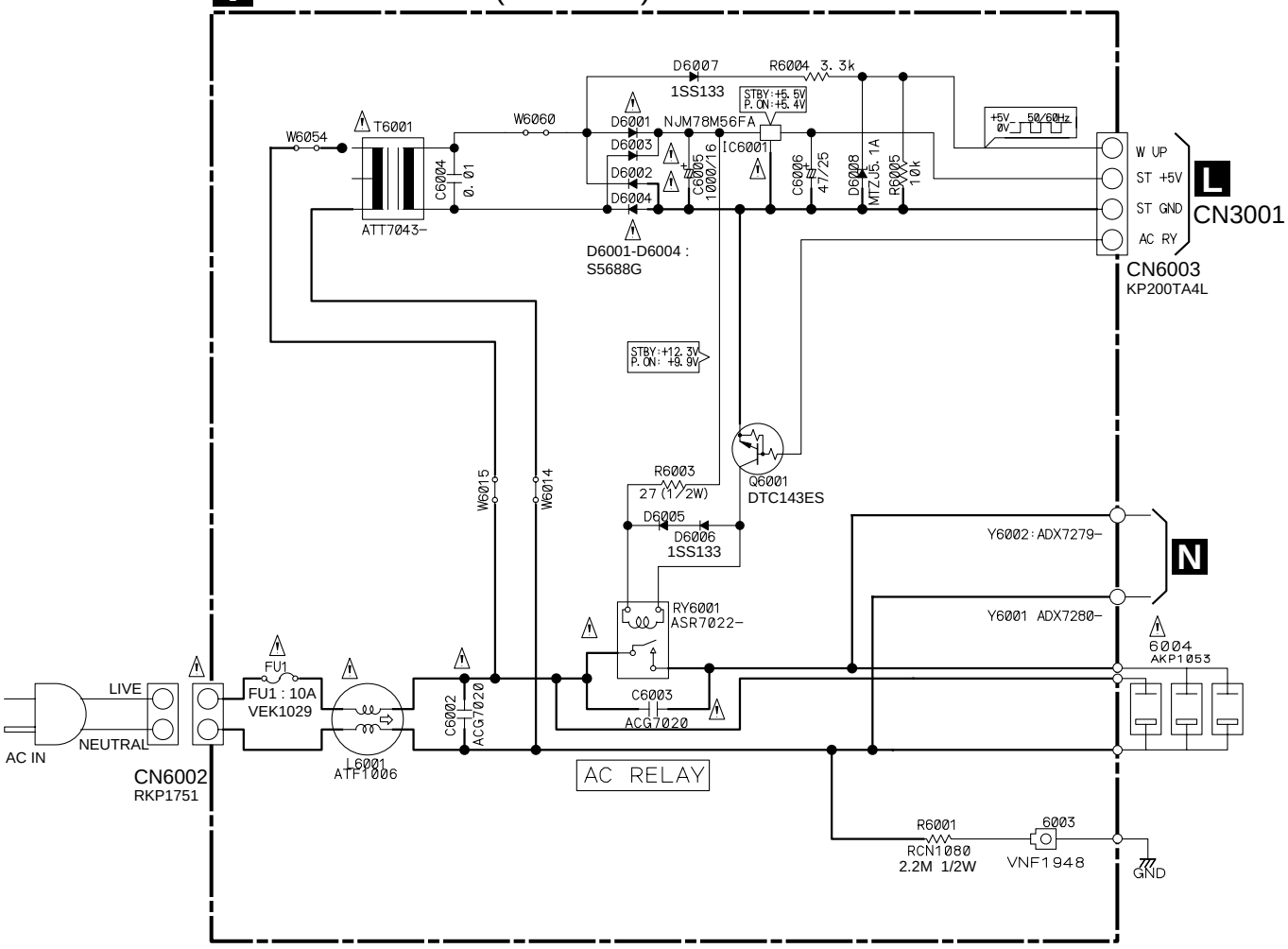


T ROTARY ENCODER ASSY
(VSX-29TX, VSX-27TX : AWX7328)
(VSX-26TX, VSX-24TX, VSX-D908S : AWX7405)



3.14 PRIMARY ASSY

V PRIMARY ASSY (AWX7311)

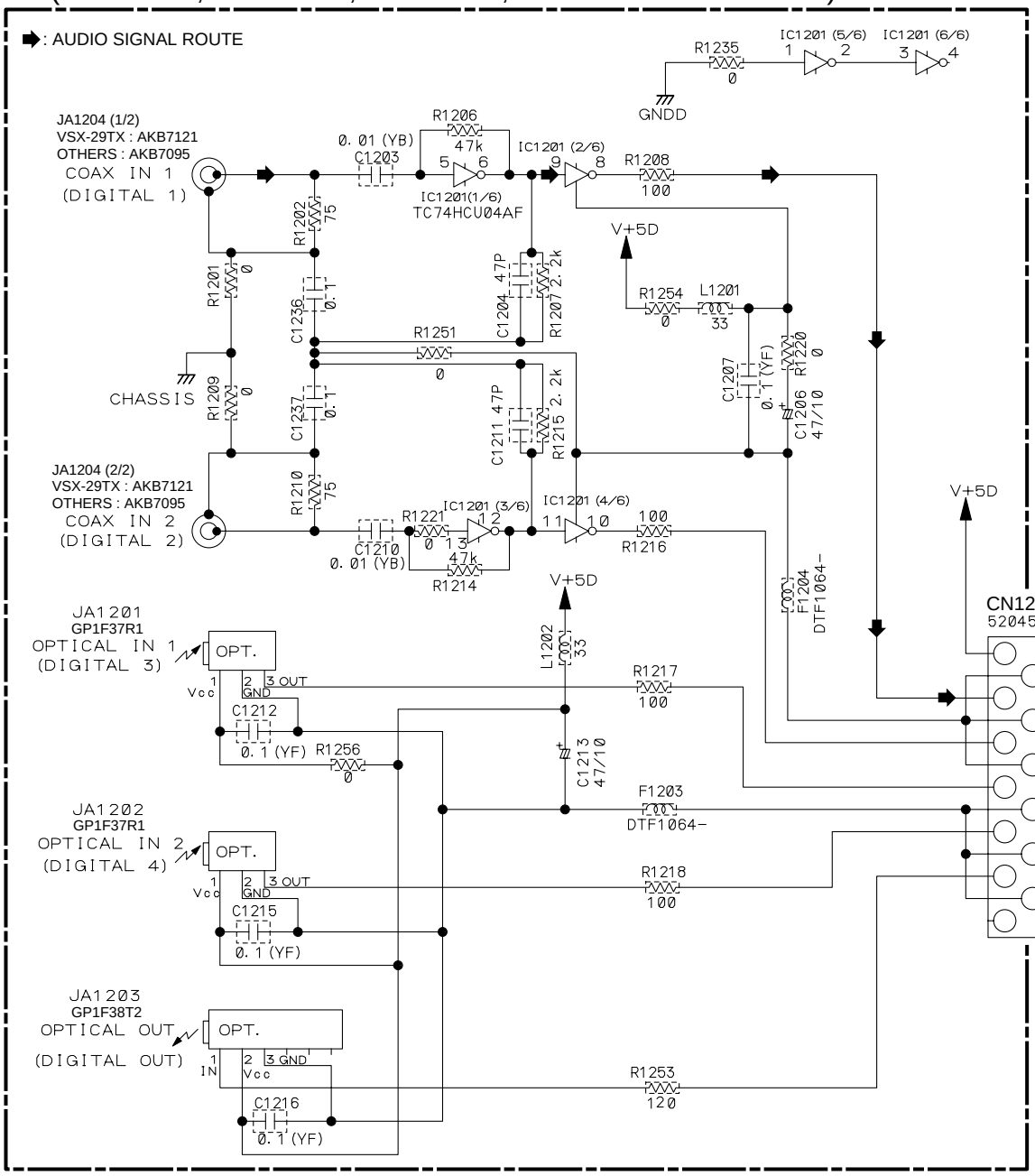


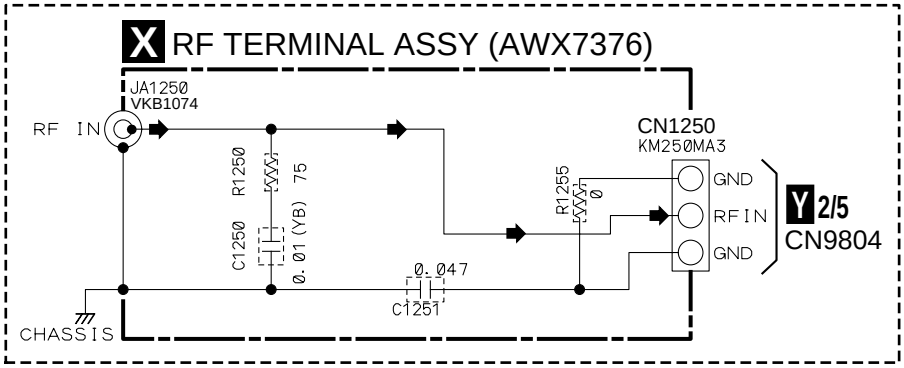
• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATINGS ONLY.

3.15 DIGITAL-I/O and RF TERMINAL ASSYS

W DIGITAL-I/O ASSY
(VSX-29TX : AWX7315)
(VSX-27TX, VSX-26TX, VSX-24TX, VSX-D908S : AWX7396)

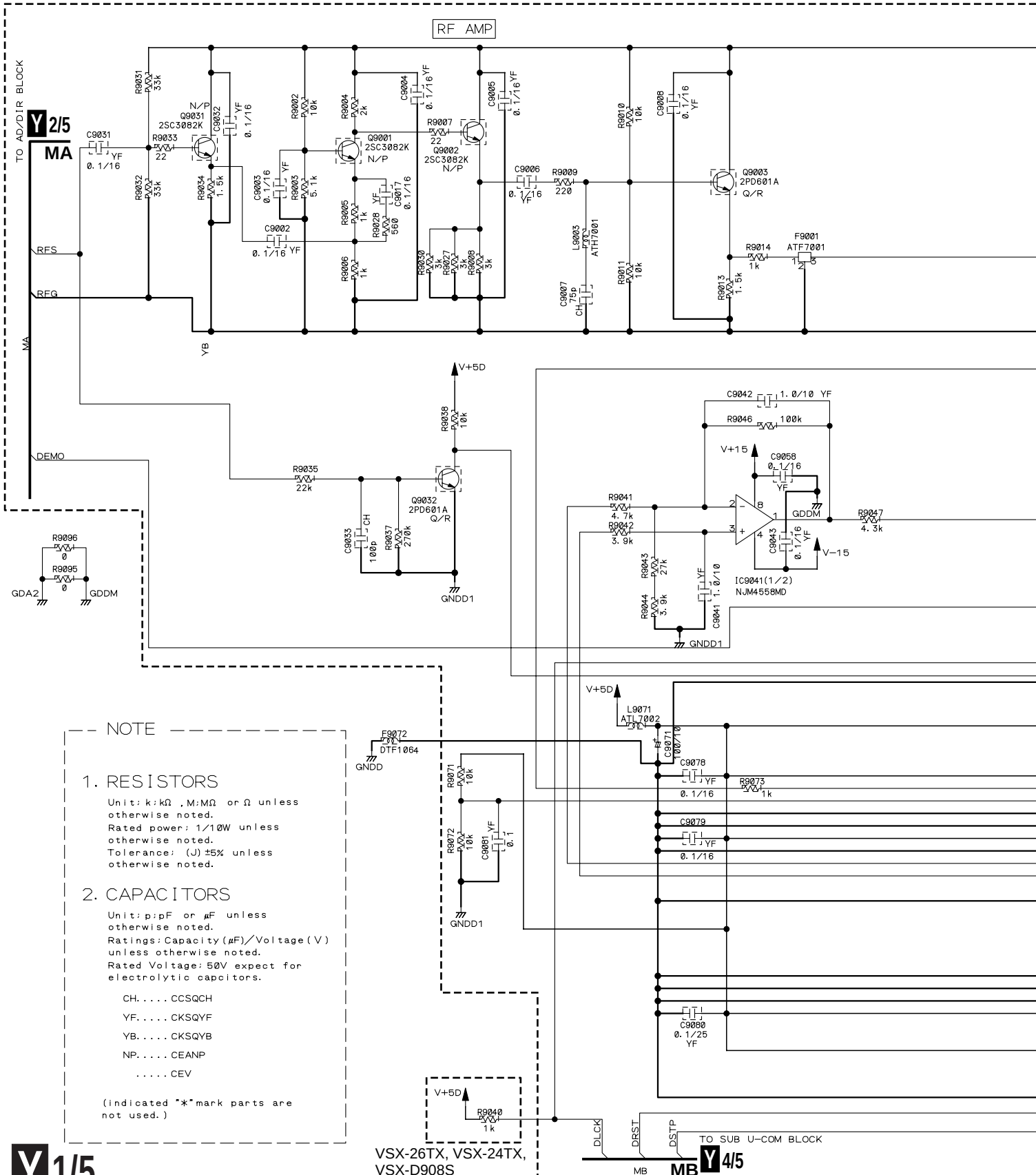




VSX-29TX, VSX-27TX ONLY

3.16 DSP ASSY (1/5)

Y 1/5 DSP ASSY
(VSX-29TX, VSX-27TX : AWX7272)
(VSX-26TX, VSX-24TX, VSX-D908S : AWX7433)



NOTE

1. RESISTORS

Unit: k;kΩ , M;MΩ or Ω unless otherwise noted.
Rated power: 1/10W unless otherwise noted.
Tolerance: (J) ±5% unless otherwise noted.

2. CAPACITORS

Unit: p;pF or μF unless otherwise noted.
Ratings: Capacity(μF)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capcitors.

CH. . . . . CCSQCH
YF. . . . . CKSQYF
YB. . . . . CKSQYB
NP. . . . . CEANP
. . . . . CEV

(indicated "*" mark parts are not used.)

VSX-26TX, VSX-24TX, VSX-D908S ONLY

VSX-29TX, VSX-27TX ONLY

AWX7272 =USE
AWX7433 =NOT USE

IC9071
PM4007A
(DEMODULATOR)

RF DEMODULATOR

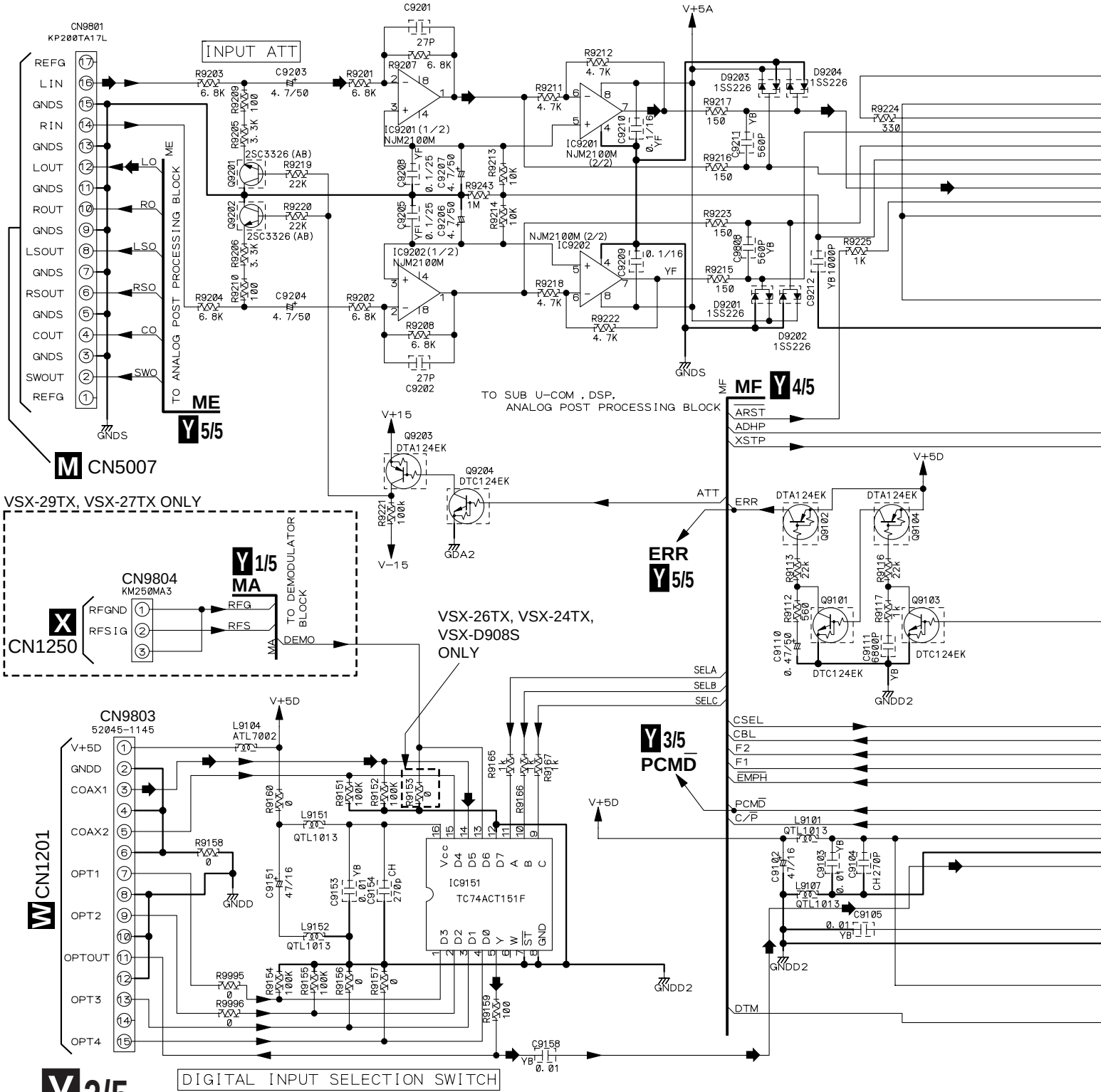
IC9091
SRM2B256SLMX70

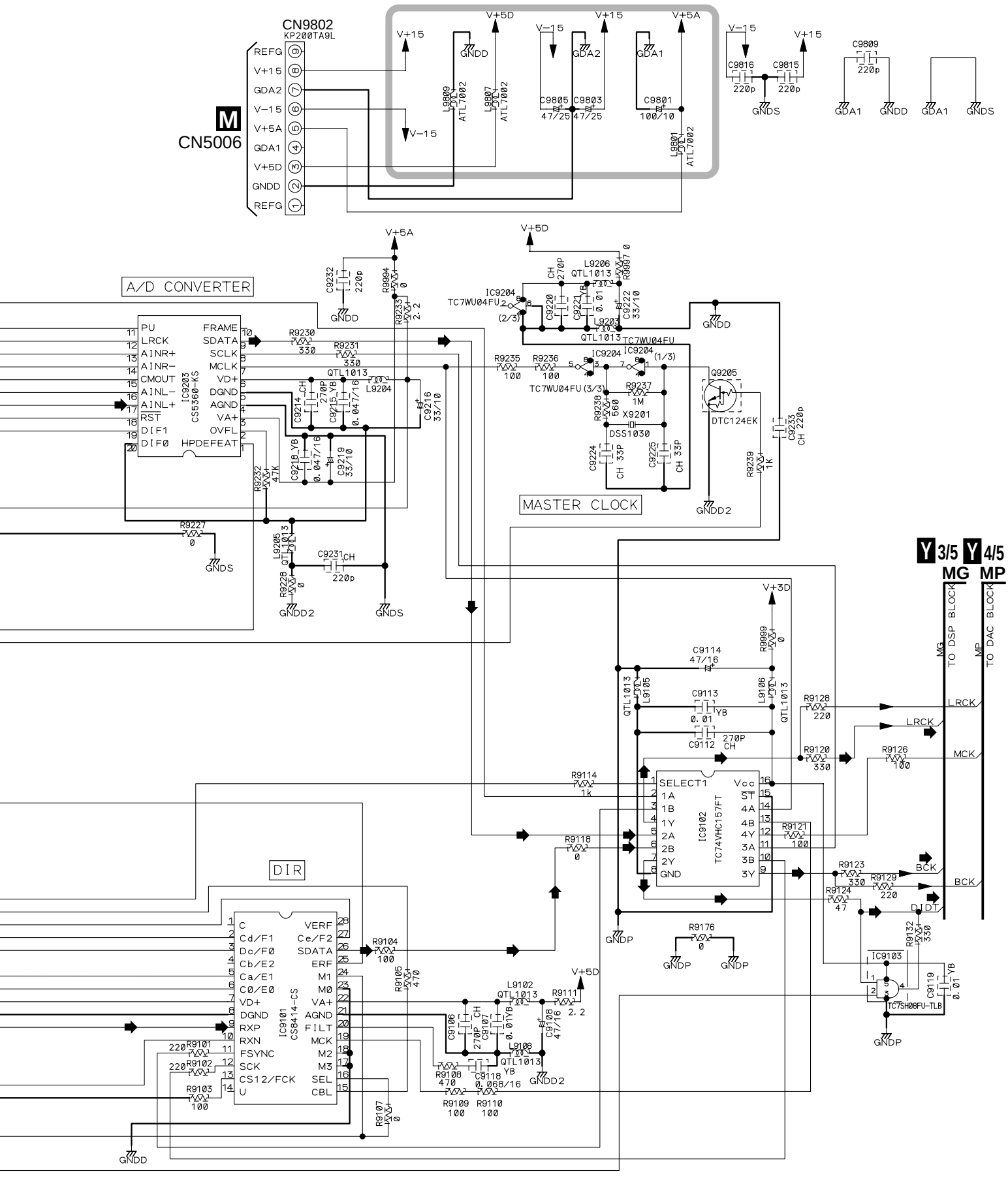
3.17 DSP ASSY (2/5)

: The power supply is shown with the marked box.

Y 2/5 DSP ASSY
(VSX-29TX, VSX-27TX : AWX7272)
(VSX-26TX, VSX-24TX, VSX-D908S : AWX7433)

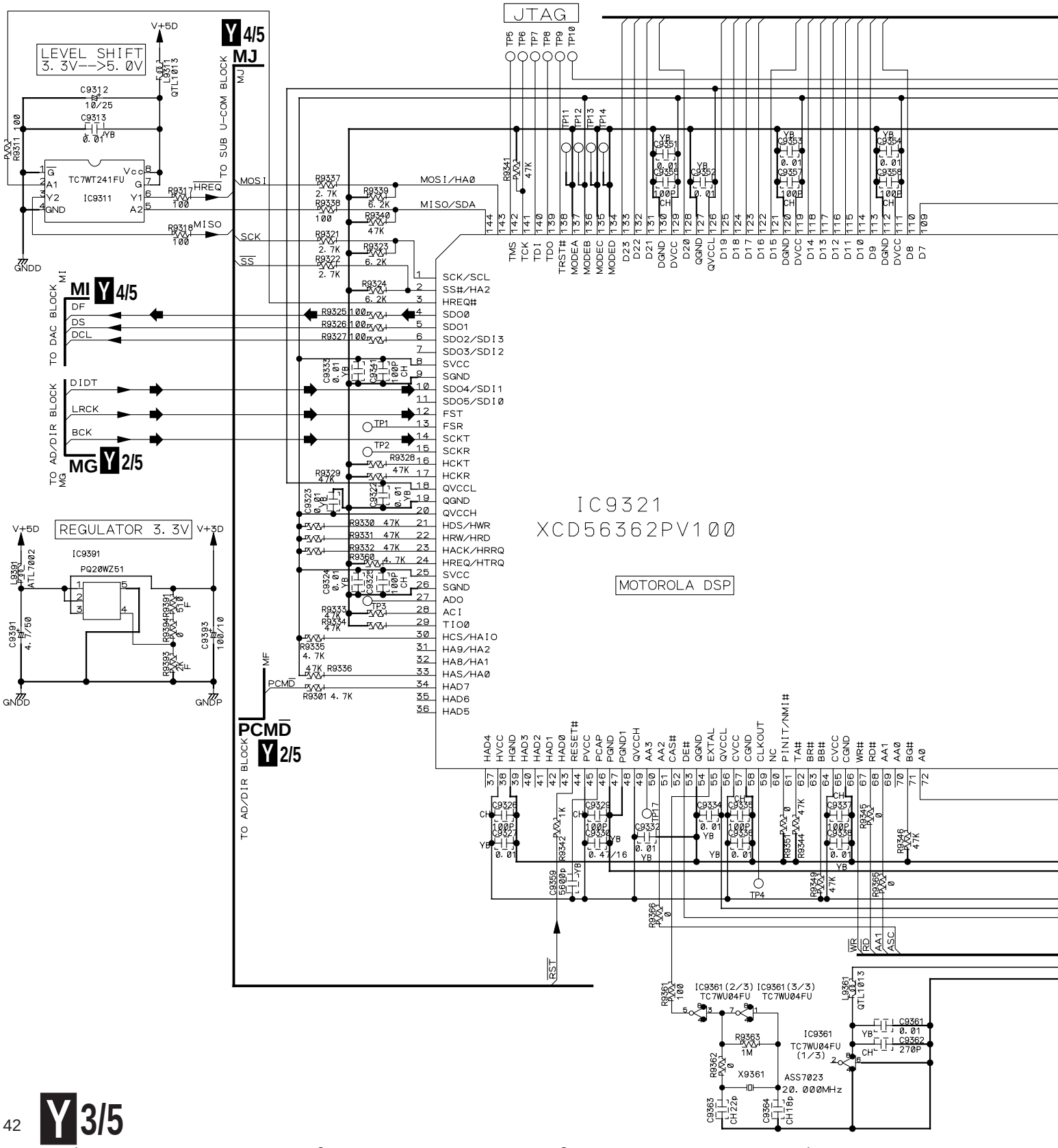
: AUDIO SIGNAL ROUTE

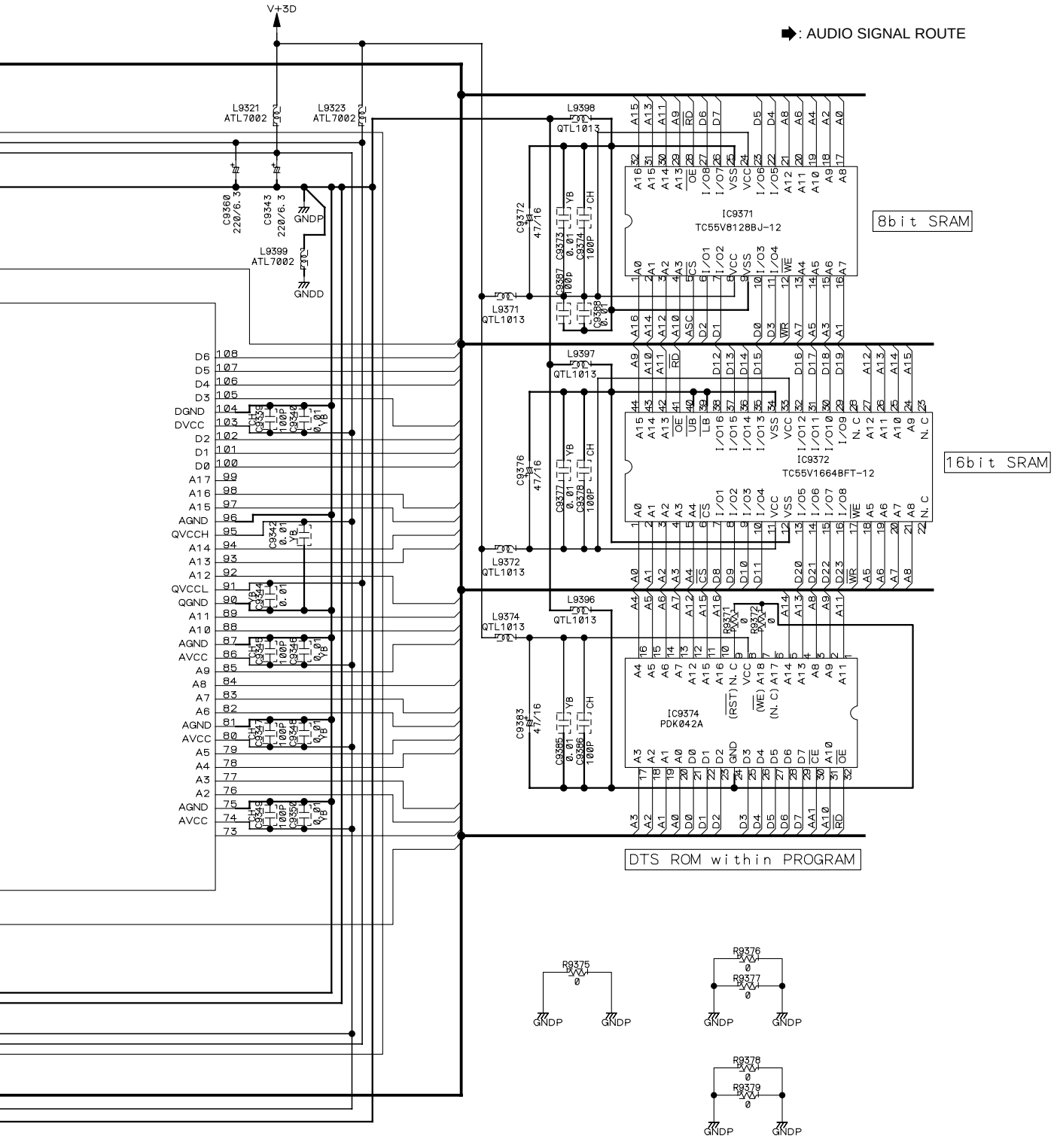



CN9802
KP200TA9L
M
CN5006
REFG
V+15
GDA2
V−15
V+5A
GDA1
V+5D
GNDD
REFG
A/D CONVERTER
IC9203
CS5360-KS
PU
LRCK
AINR+
AINR−
CMOUT
AINL−
AINL+
RST
DIF1
DIF0
FRAME
SDATA
SCLK
MCLK
VD+
DGND
AGND
VA+
OVFL
HPDEFEAT
MASTER CLOCK
IC9204
TC7WU04FU
DTC124EK
DSS1030
X9201
IC9102
TC74VHC157FT
SELECT1
Vcc
GND
DIR
IC9101
CS8414-CS
IC9103
TC7SH08FU-TLB
V+3D
GNDP
GNDD2
GNDS
Y 3/5 Y 4/5
MG MP
TO DSP BLOCK
TO DAC BLOCK
LRCK
MCK
BCK
DIDT

3.18 DSP ASSY (3/5)

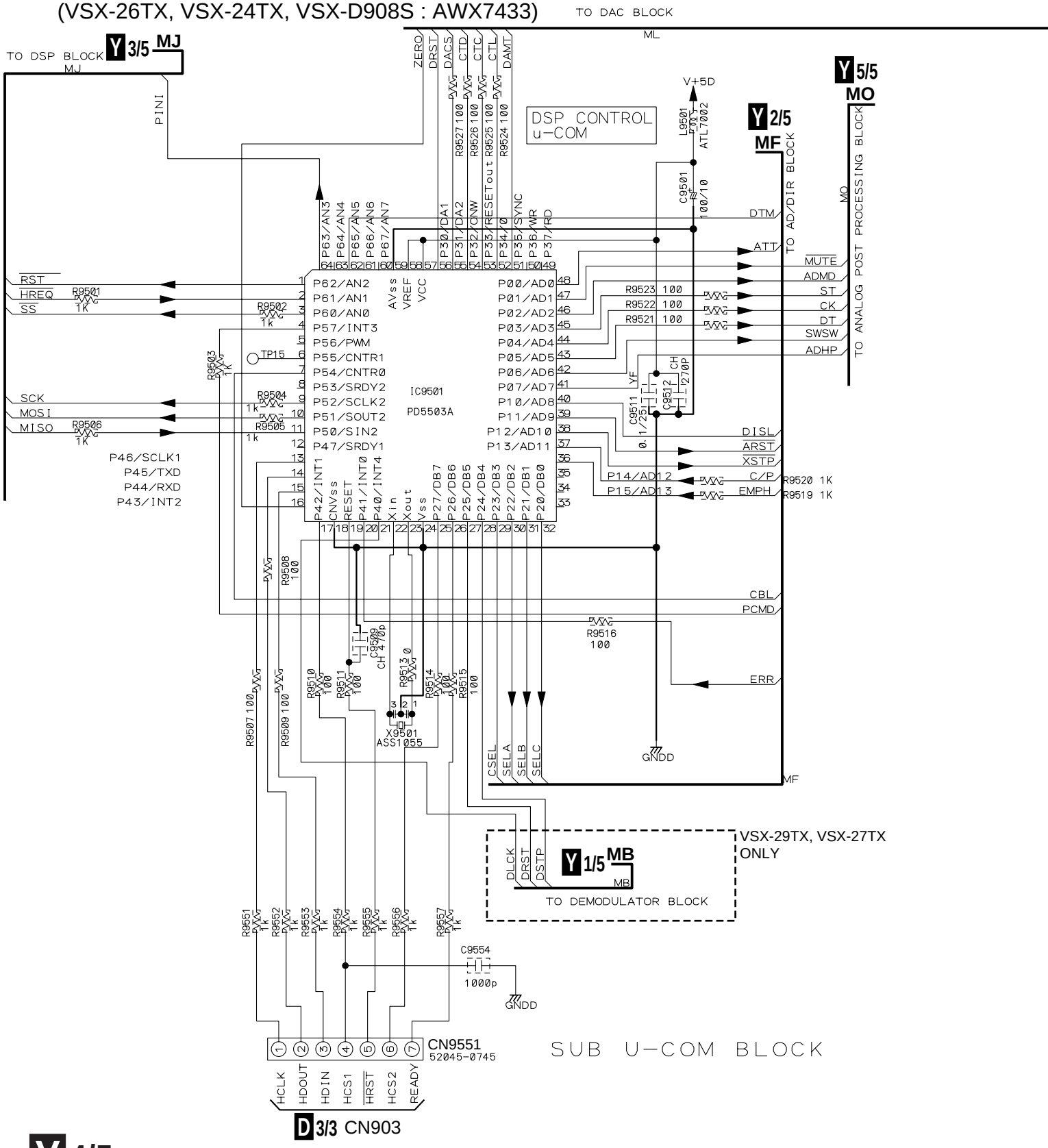
Y 3/5 DSP ASSY
(VSX-29TX, VSX-27TX : AWX7272)
(VSX-26TX, VSX-24TX, VSX-D908S : AWX7433)



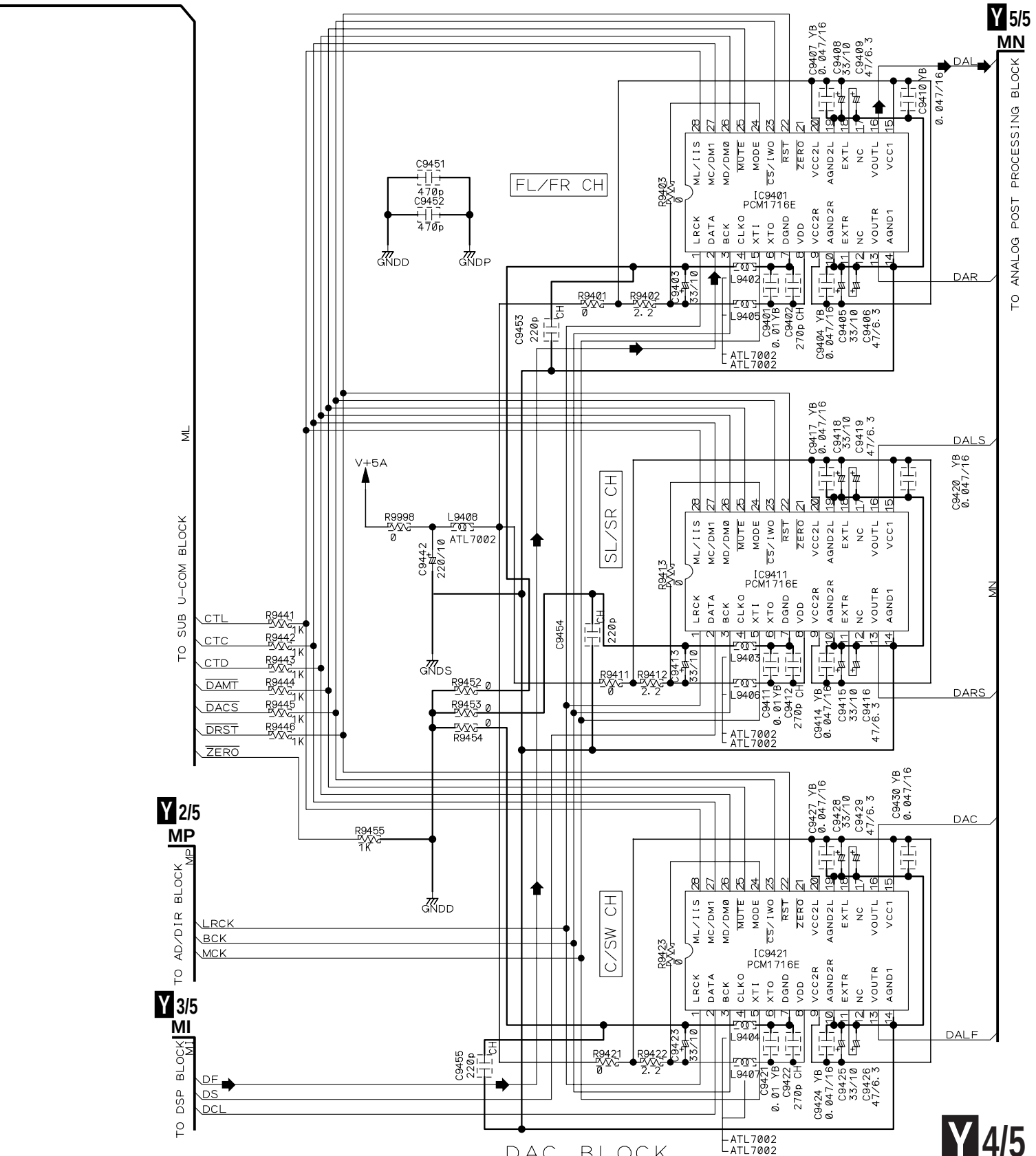

➡: AUDIO SIGNAL ROUTE
V+3D
L9321 ATL7002
L9323 ATL7002
L9399 ATL7002
GNDD
GNDP
C9360 220/6.3
C9343 220/6.3
L9398 QTL1013
L9371 QTL1013
L9397 QTL1013
L9372 QTL1013
L9396 QTL1013
L9374 QTL1013
IC9371 TC55V8128BJ-12
8bit SRAM
IC9372 TC55V1664BFT-12
16bit SRAM
IC9374 PDK042A
DTS ROM within PROGRAM
C9372 47/16
C9376 47/16
C9383 47/16
C9373 0.01
C9374 100P
C9377 0.01
C9378 100P
C9385 0.01
C9386 100P
C9387 100P
C9388 0.01
C9339 0.01
C9340 100P
C9341 0.01
C9342 0.01
C9343 0.01
C9344 0.01
C9345 0.01
C9346 100P
C9347 0.01
C9348 100P
C9349 0.01
C9350 100P
C9351 0.01
R9371 0
R9372 0
R9375 0
R9376 0
R9377 0
R9378 0
R9379 0
D6 D5 D4 D3 DGND DVCC D2 D1 D0 A17 A16 A15 AGND QVCCH A14 A13 A12 QVCCL QGND A11 A10 AGND AVCC A9 A8 A7 A6 AGND AVCC A5 A4 A3 A2 AGND AVCC

3.19 DSP ASSY (4/5)

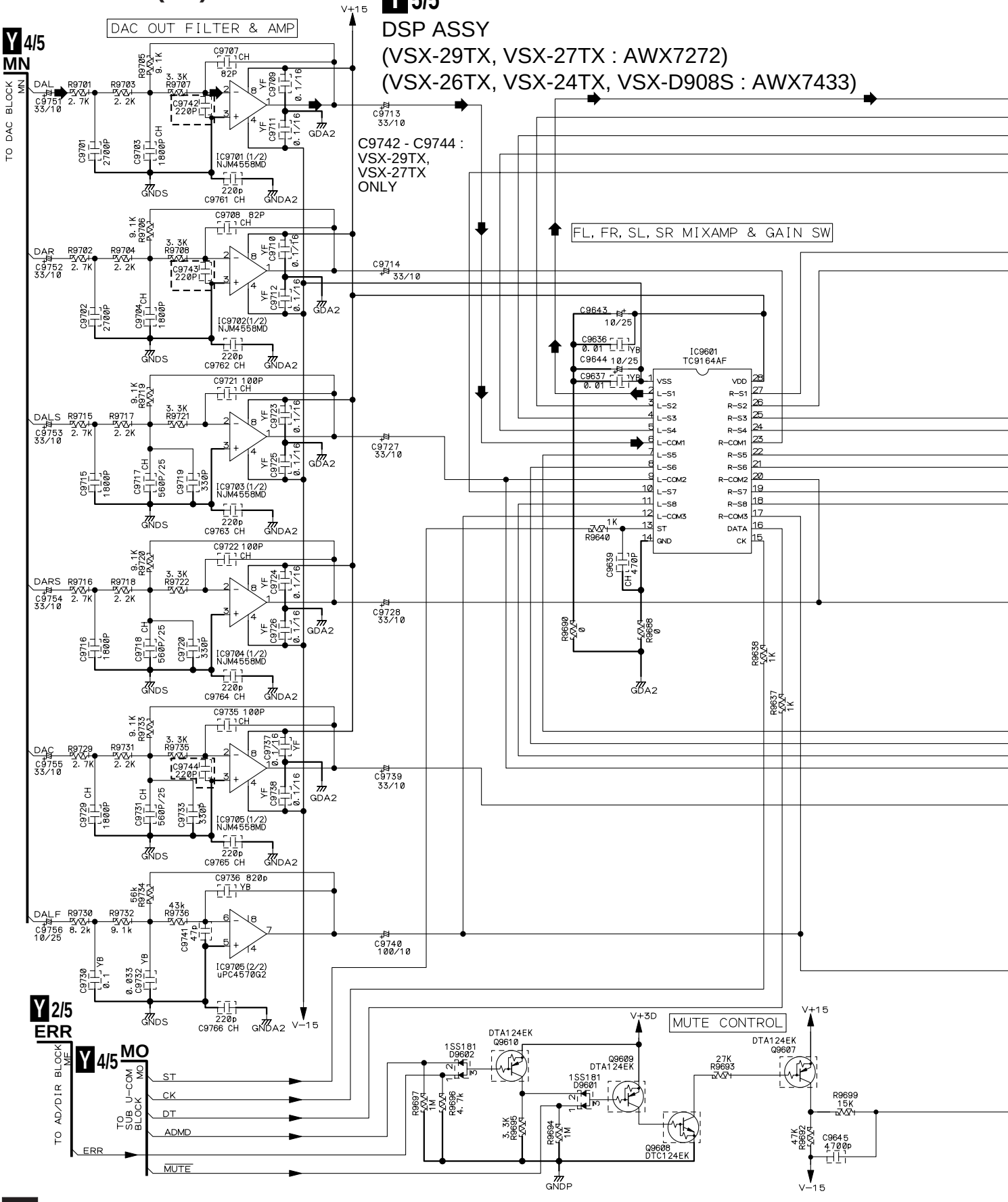
Y 4/5 DSP ASSY
(VSX-29TX, VSX-27TX : AWX7272)
(VSX-26TX, VSX-24TX, VSX-D908S : AWX7433)



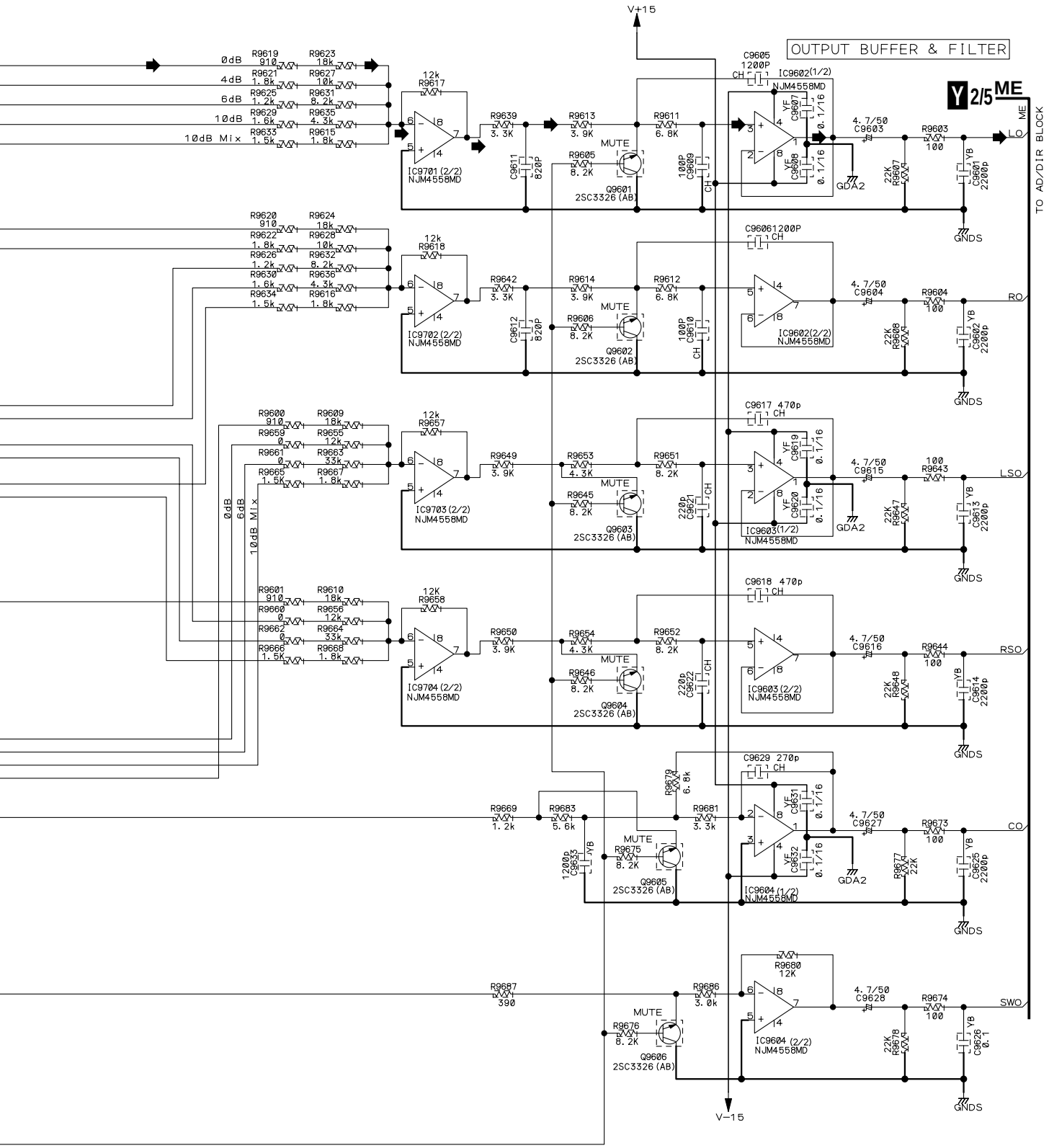
: AUDIO SIGNAL ROUTE



3.20 DSP ASSY (5/5)



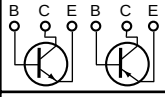
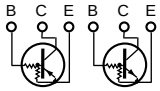
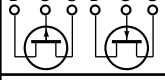
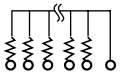
: AUDIO SIGNAL ROUTE



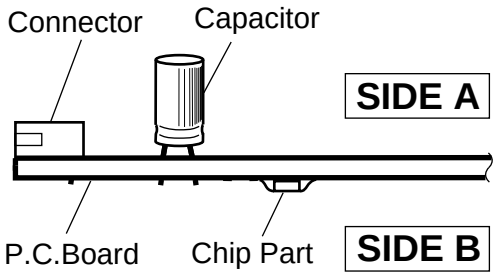
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

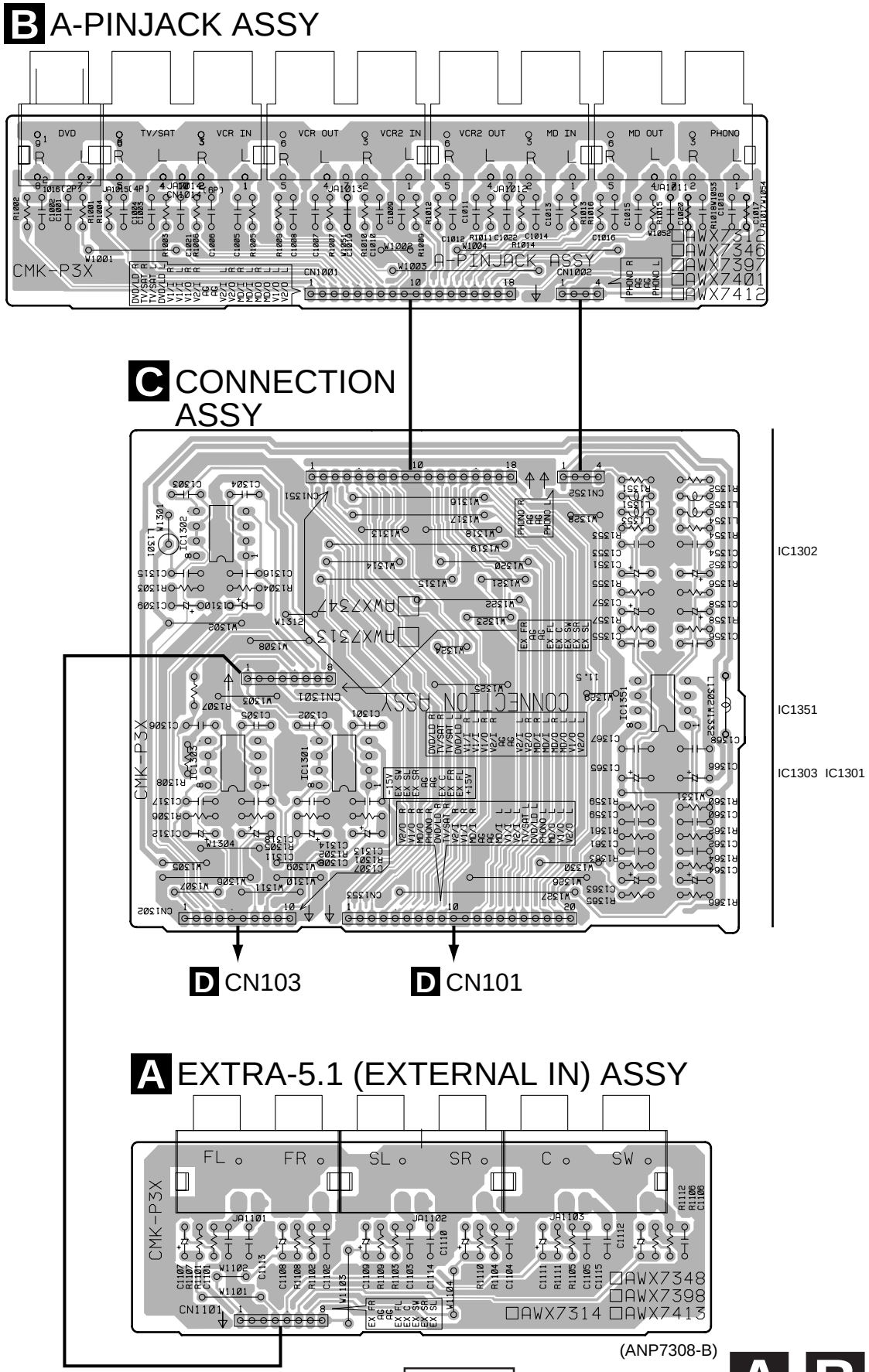
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

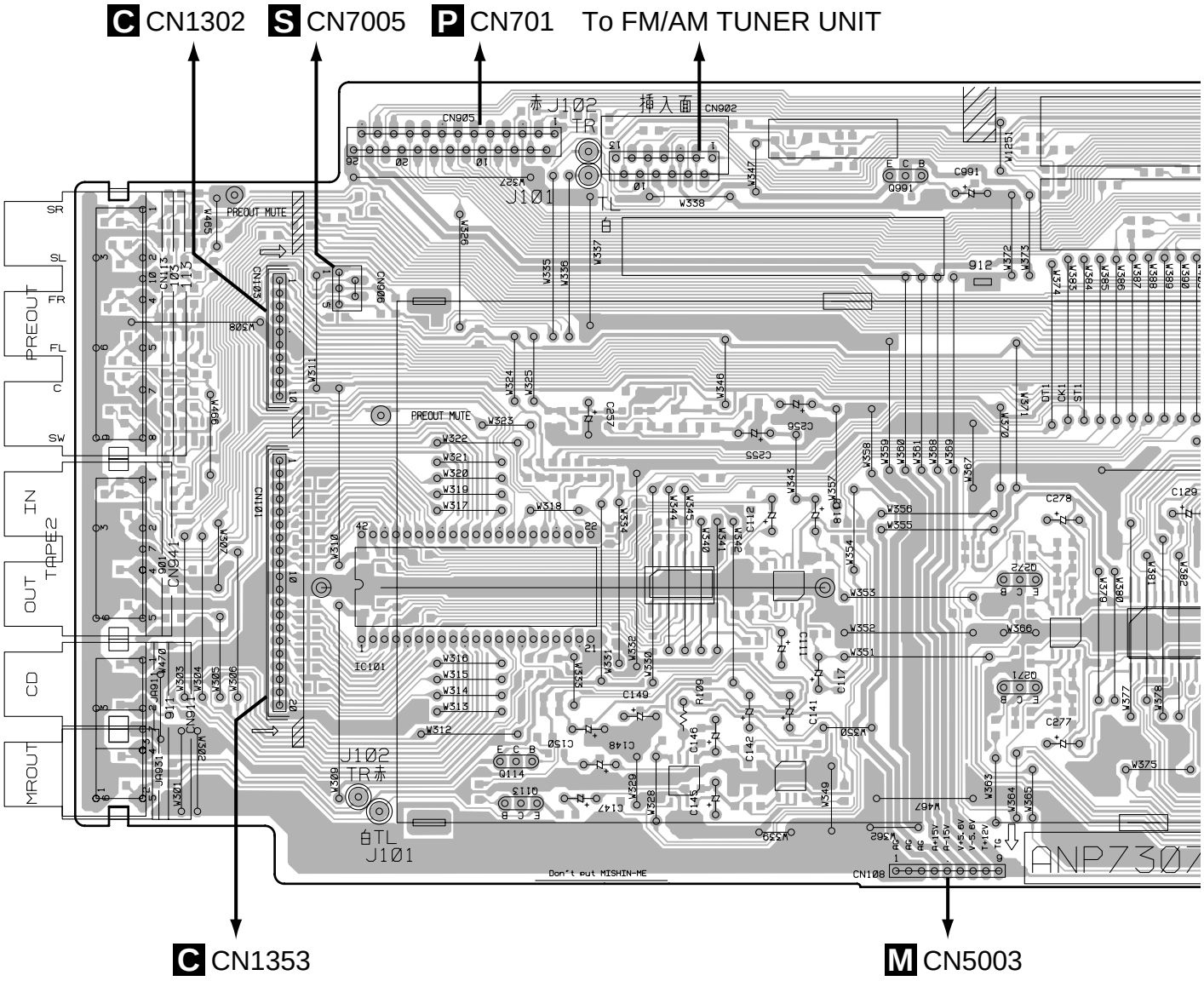
3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



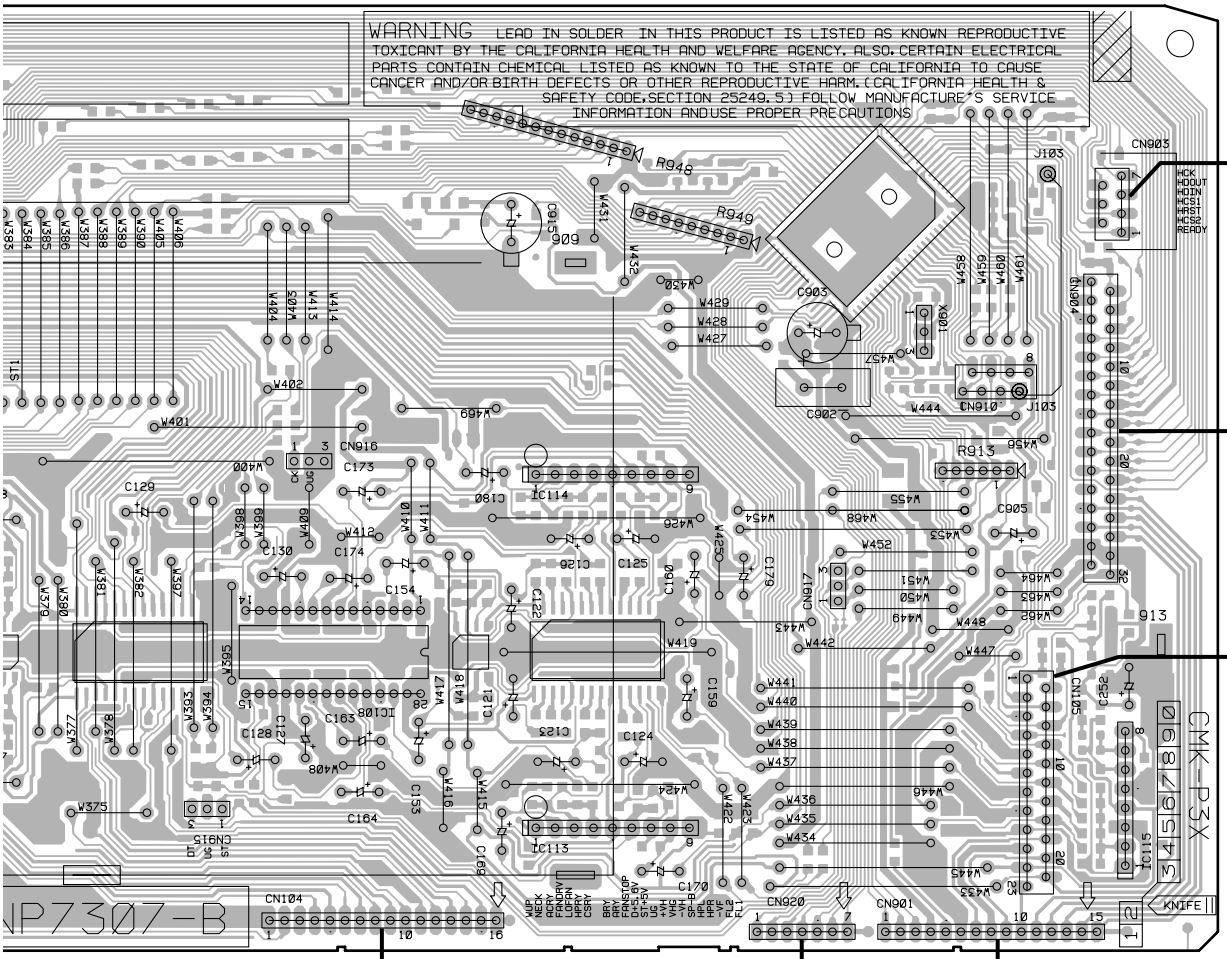
4.1 EXTRA-5.1 (EXTERNAL IN), A-PINJACK and CONNECTION ASSYS



4.2 MAIN CONTROL ASSY



D MAIN CONTROL ASSY


WARNING LEAD IN SOLDER IN THIS PRODUCT IS LISTED AS KNOWN REPRODUCTIVE TOXICANT BY THE CALIFORNIA HEALTH AND WELFARE AGENCY. ALSO, CERTAIN ELECTRICAL PARTS CONTAIN CHEMICAL LISTED AS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND/OR BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. (CALIFORNIA HEALTH & SAFETY CODE, SECTION 25249.5) FOLLOW MANUFACTURE'S SERVICE INFORMATION AND USE PROPER PRECAUTIONS
ANP7307-B
CMK-P3X
KNIFE
(ANP7307-B)

Y CN9551

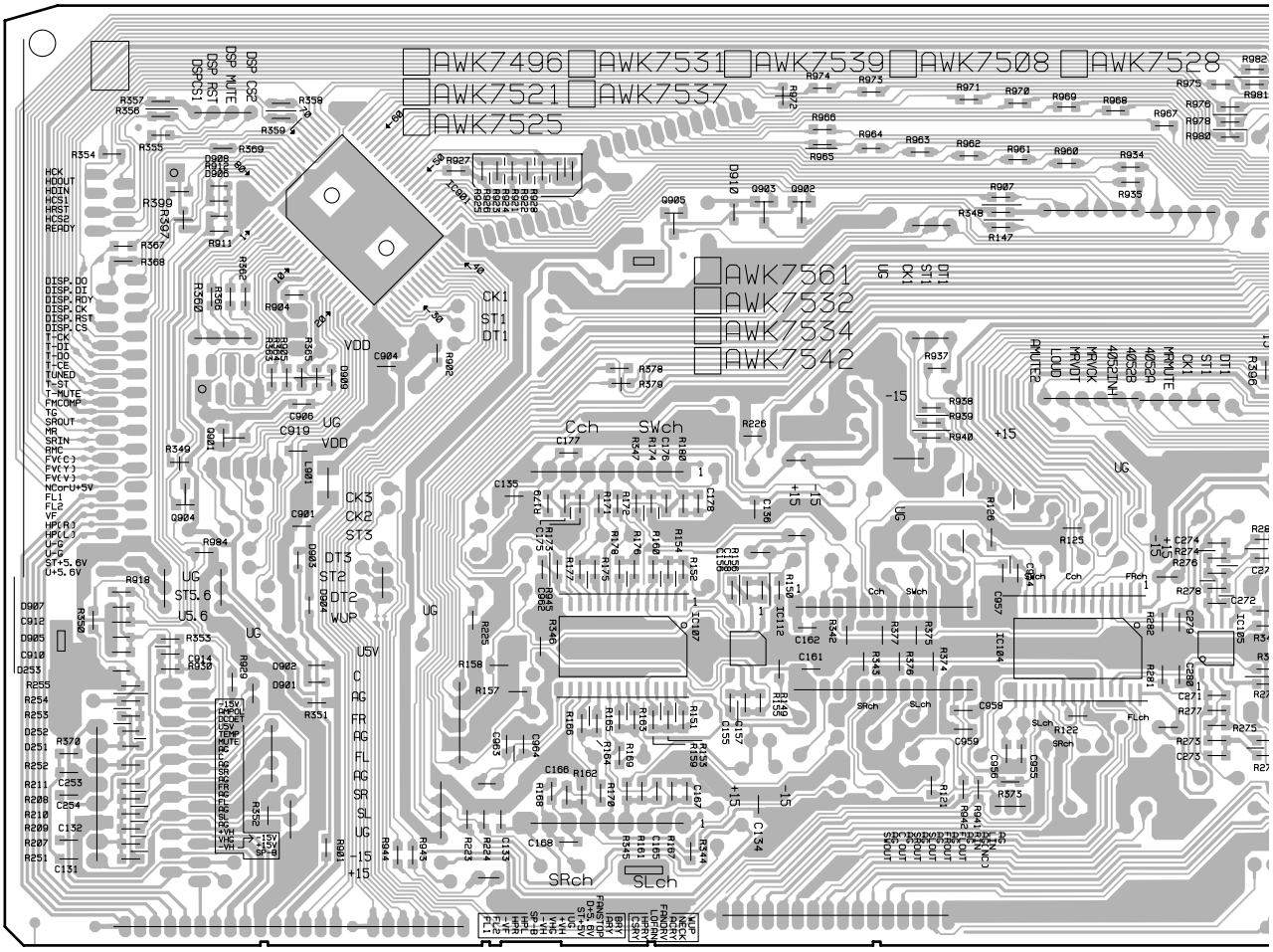
S CN7001

E CN501

M CN5004 M CN5008 M CN5005

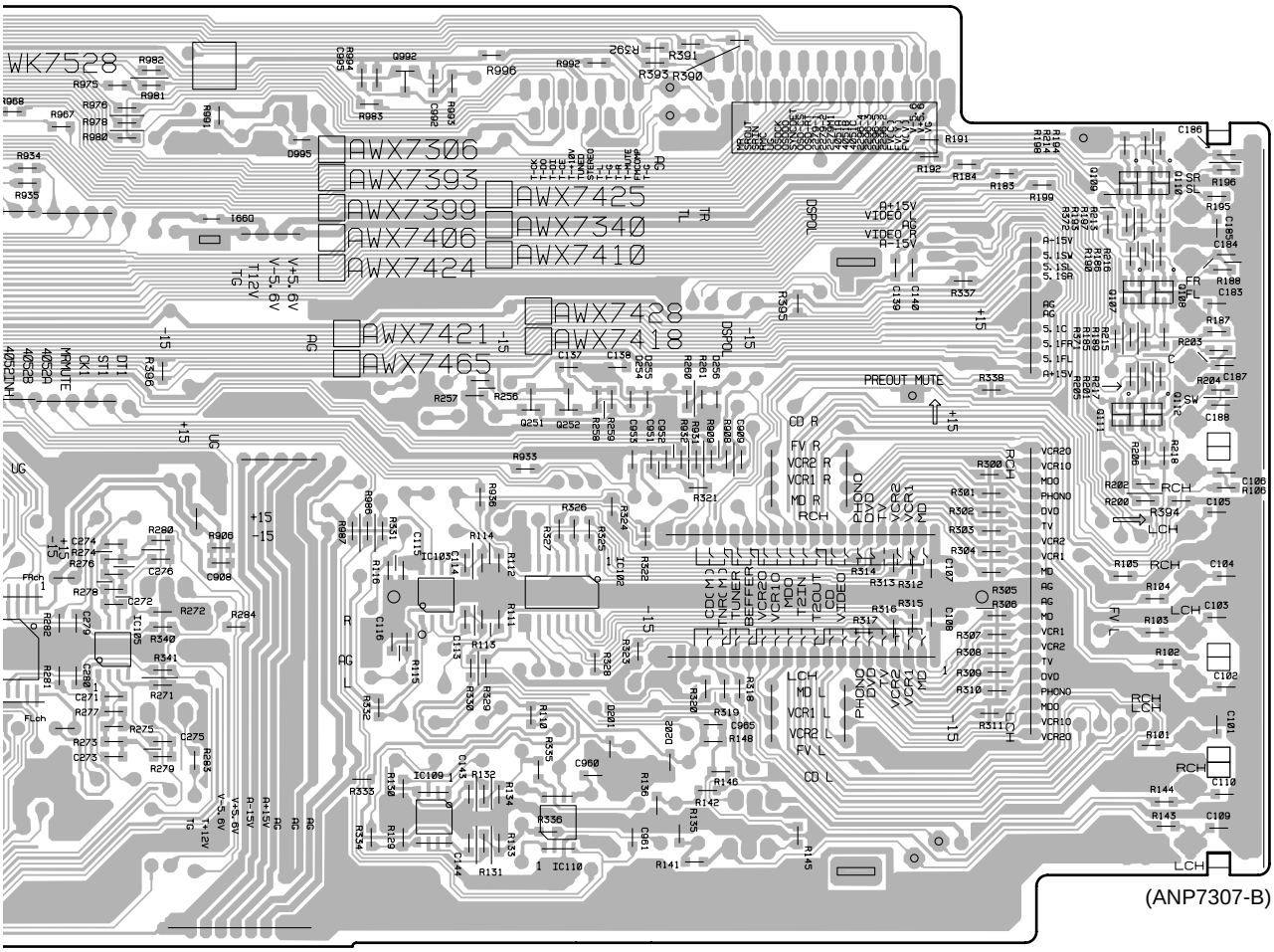
IC108 IC114 IC113 IC115

D MAIN CONTROL ASSY



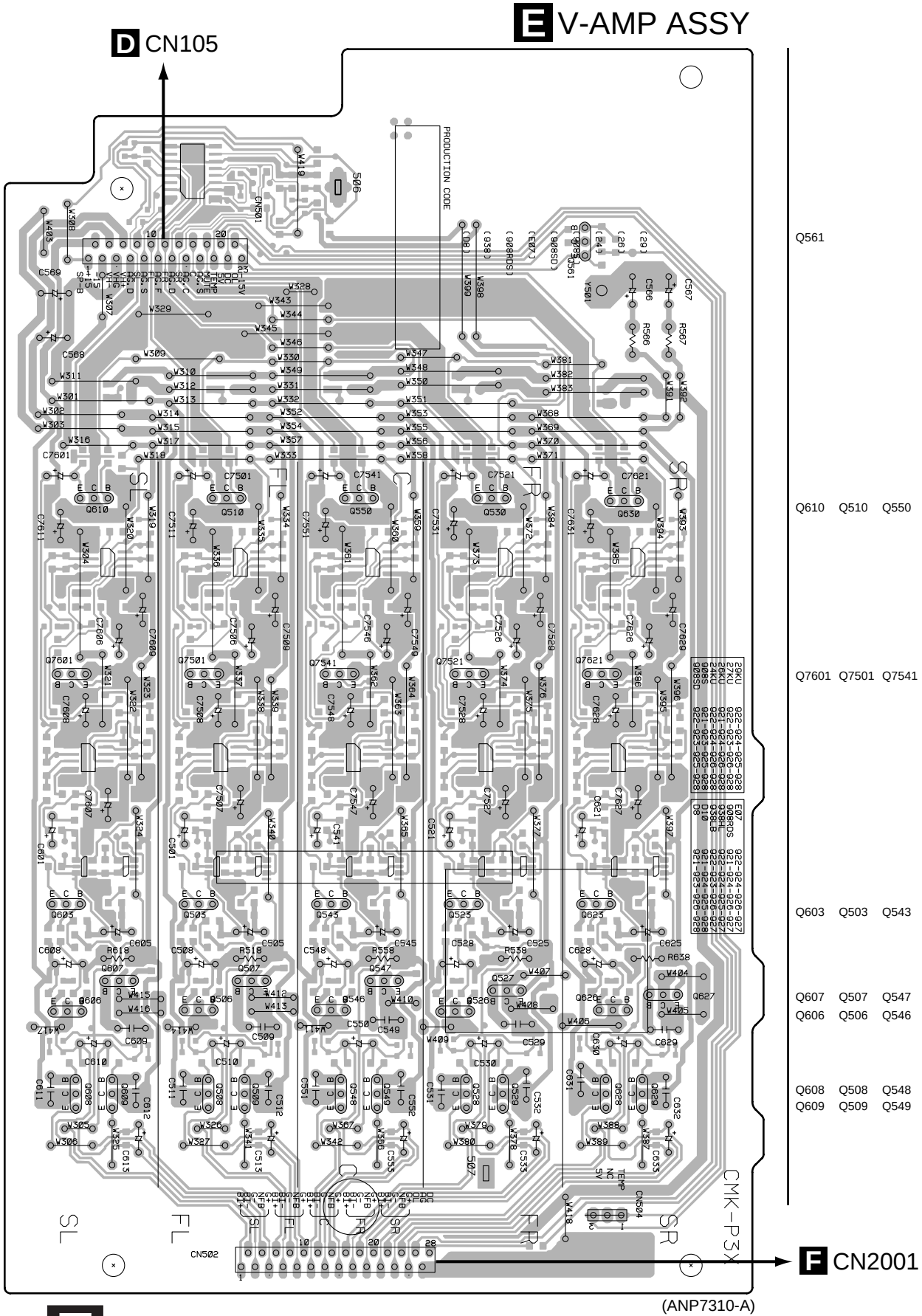
Q904 Q901 IC901 Q905 Q903 Q902 IC104 IC105
IC107 IC112

SIDE B



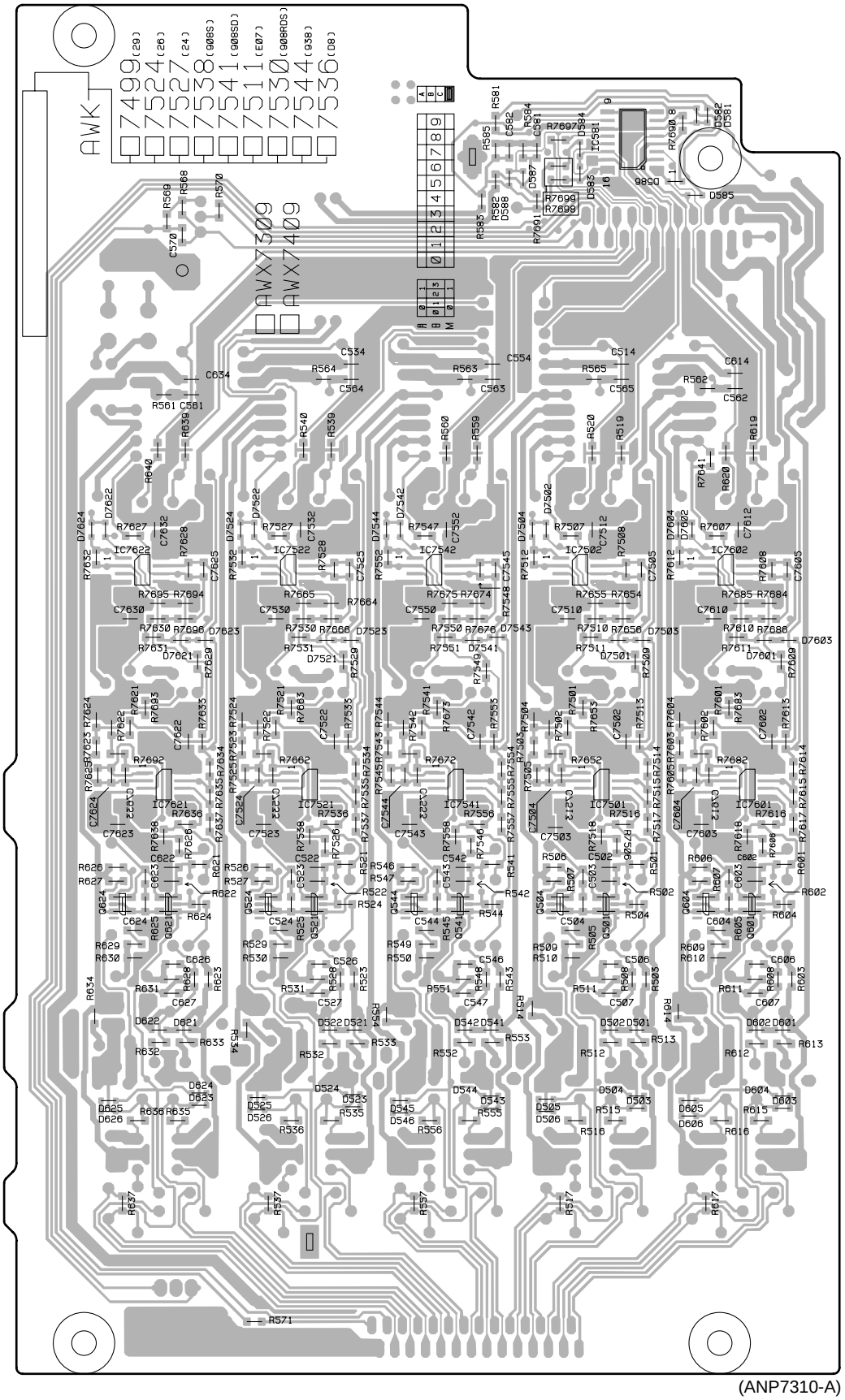
IC105		Q902	Q251	Q252		Q109	Q110
		IC103	IC102			Q107	Q108
		IC109	IC110			Q111	Q112

4.3 V-AMP ASSY



(ANP7310-A)

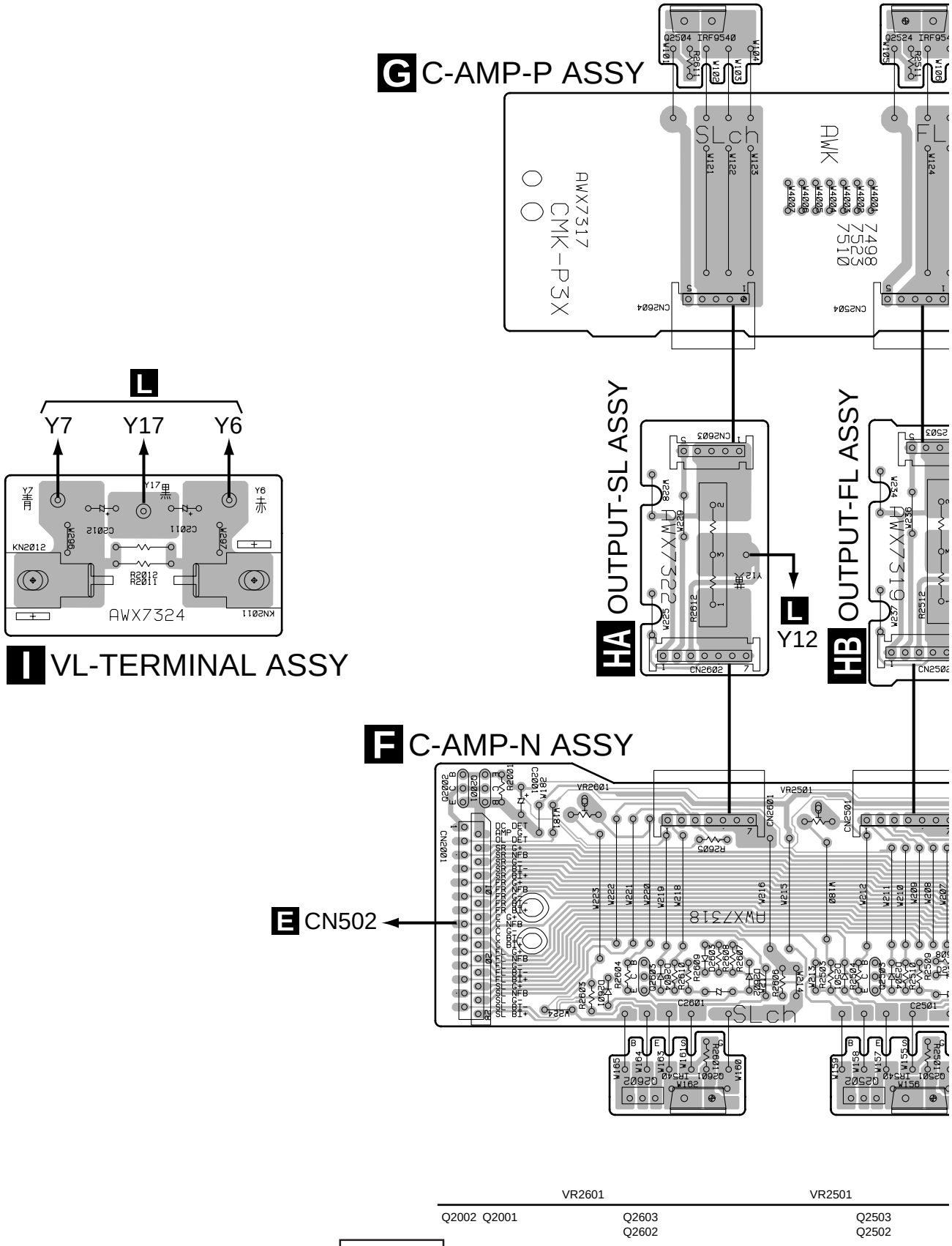
E V-AMP ASSY



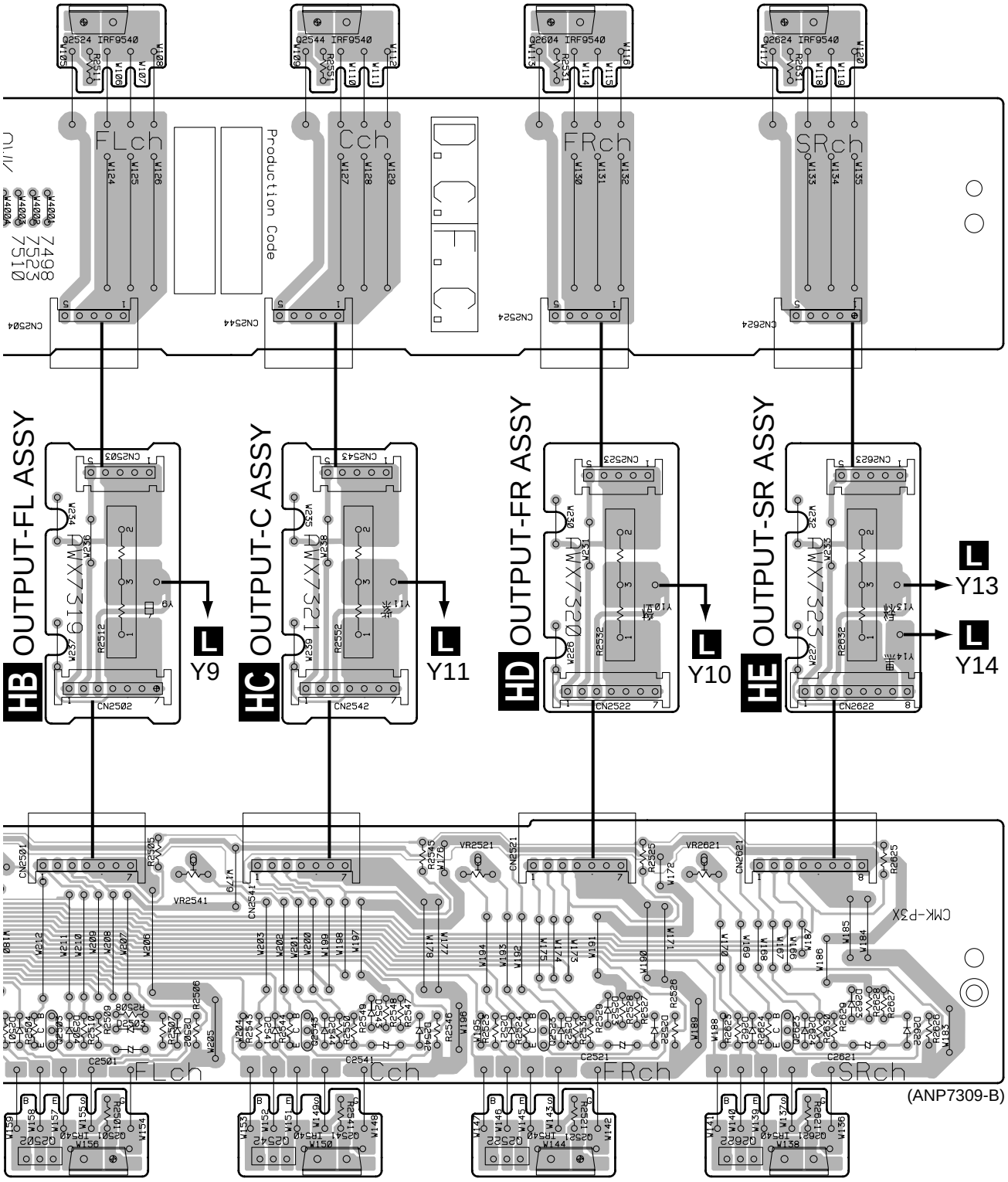
(ANP7310-A)

SIDE B

4.4 C-AMP-N, C-AMP-P, OUTPUT-SL, OUTPUT-FL, OUTPUT-C, OUTPUT-FR, OUTPUT-SR and VL-TERMINAL ASSYS

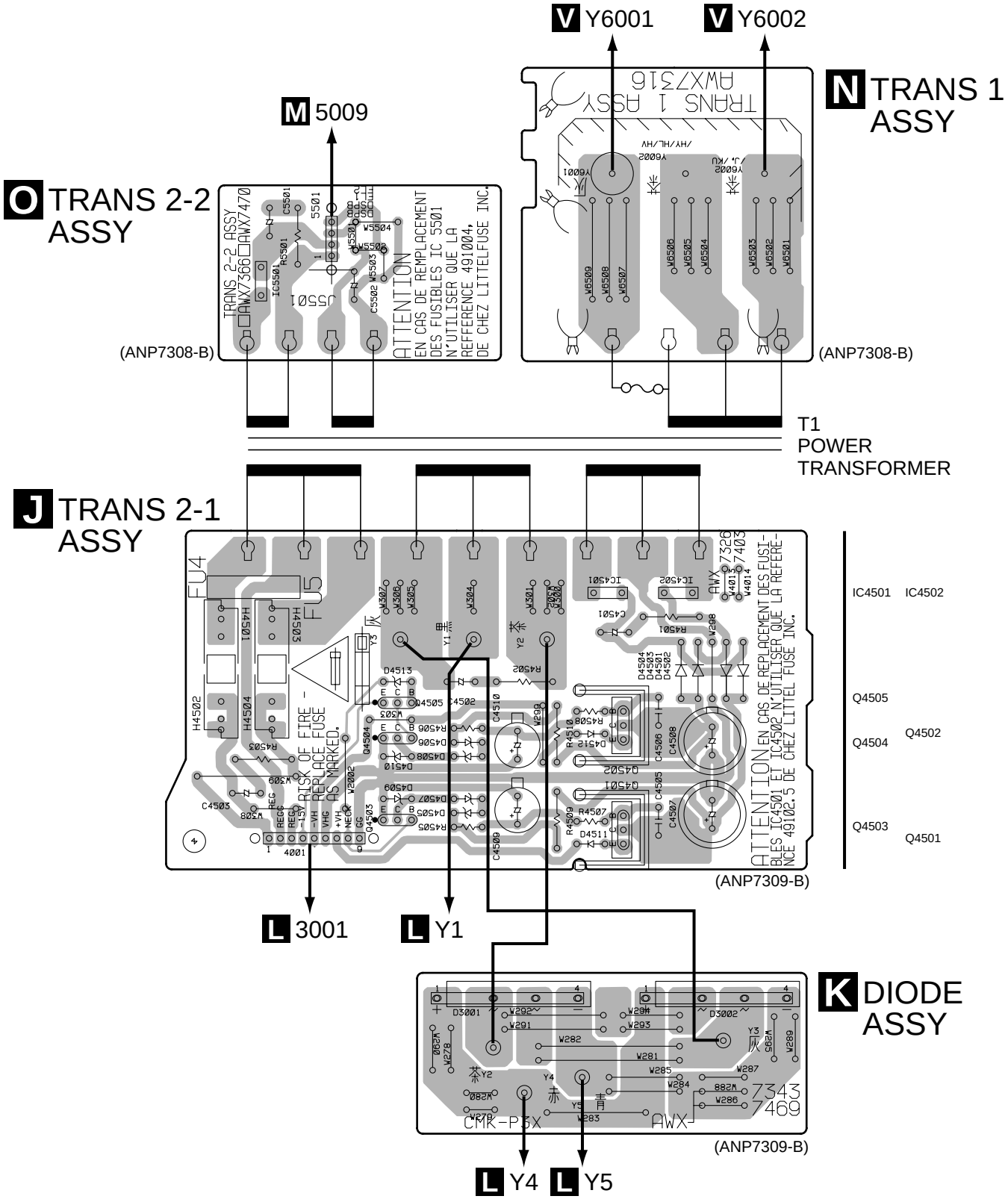


F G HA HB I

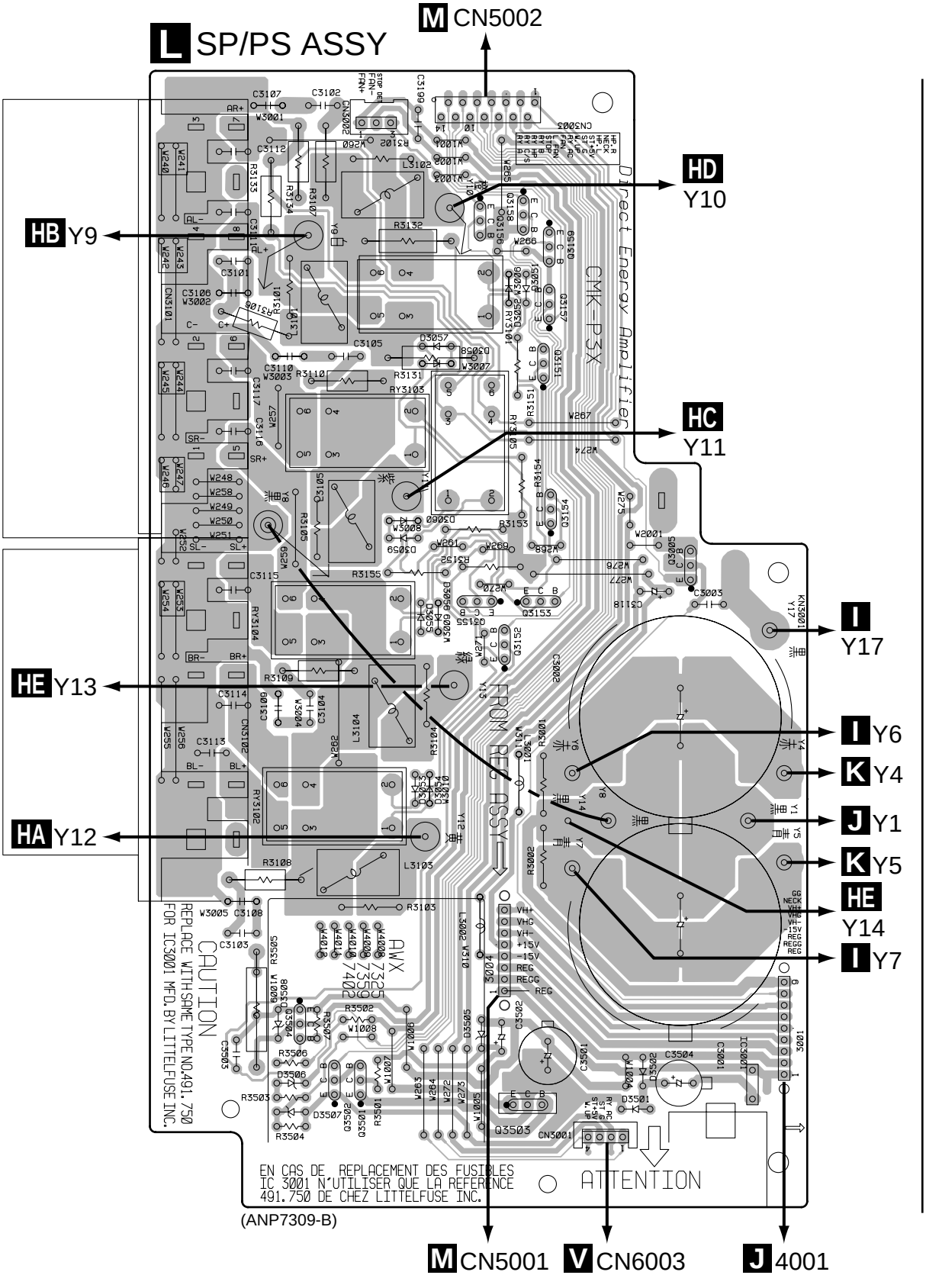


2501	VR2541	VR2521	VR2621
Q2503 Q2502	Q2543 Q2542	Q2523 Q2522	Q2623 Q2622

4.5 TRANS 2-1, DIODE, TRANS 1 and TRANS 2-2 ASSYS

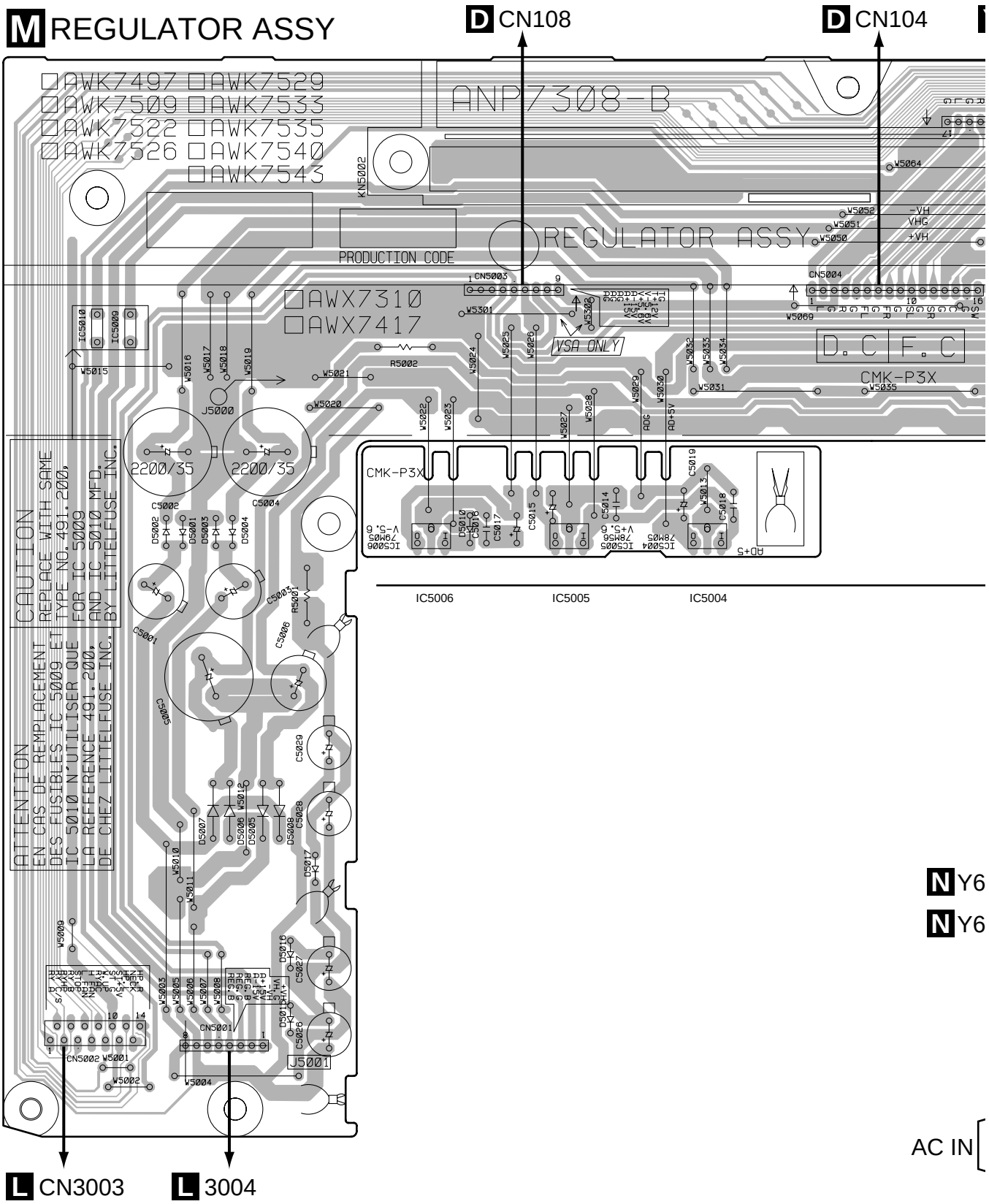


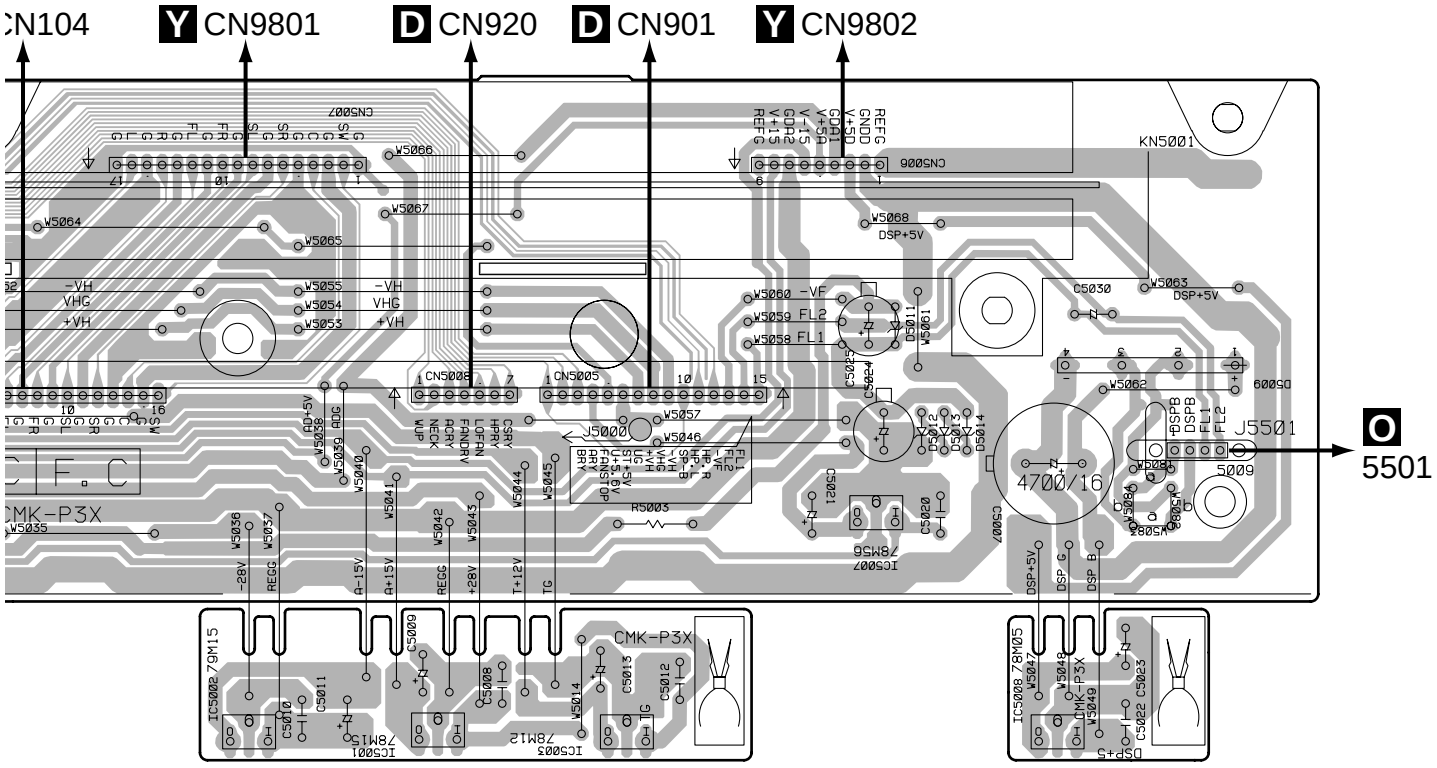
4.6 SP/PS ASSY

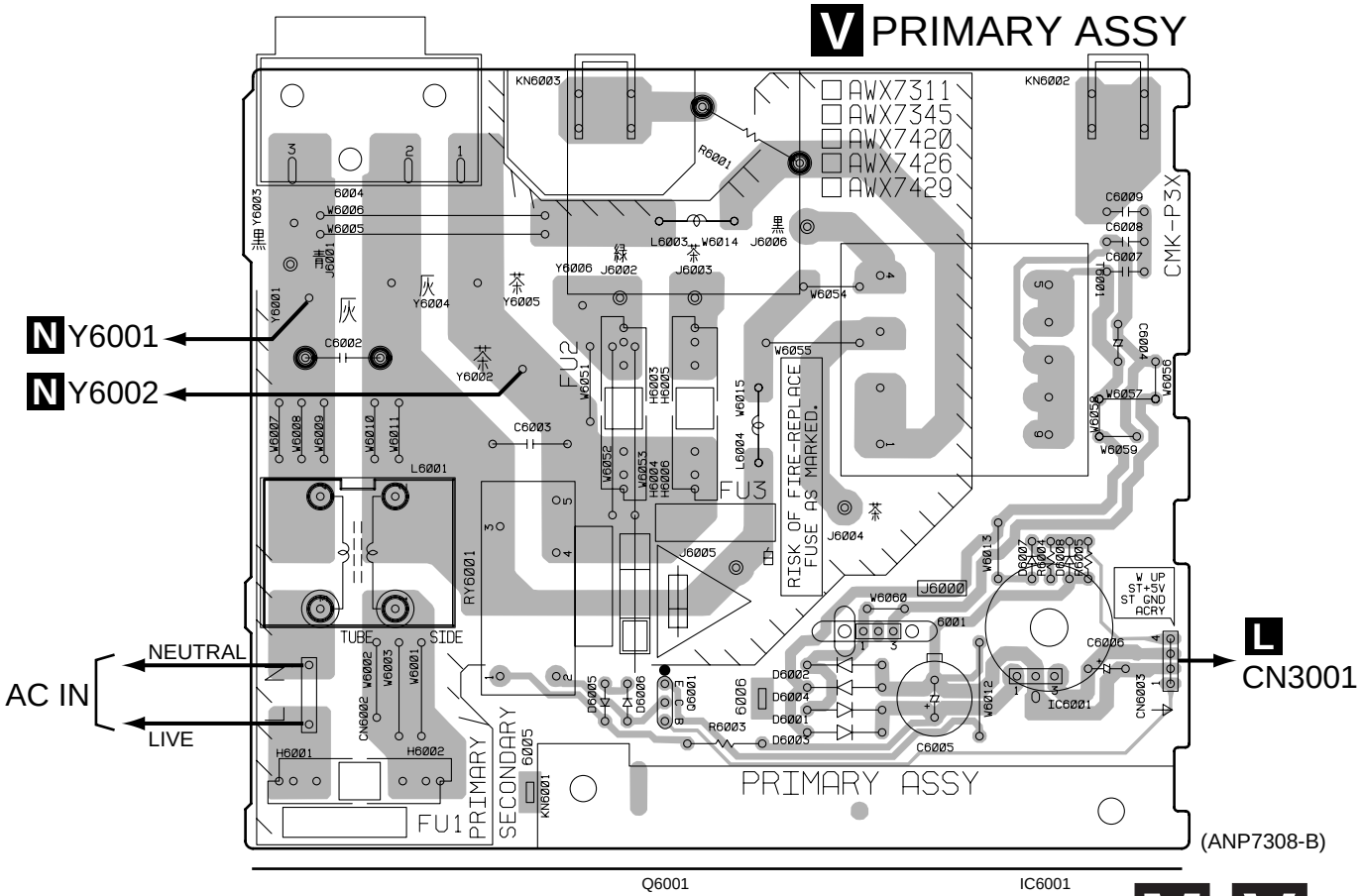


SIDE A

4.7 REGULATOR and PRIMARY ASSYS

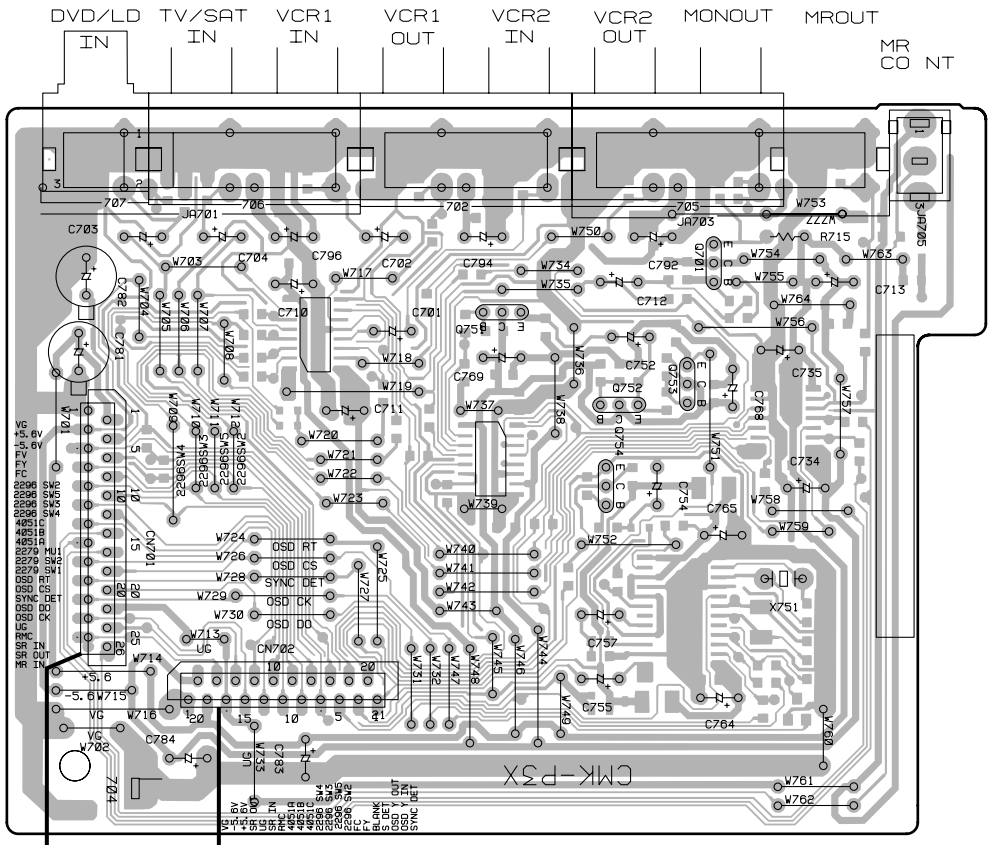



CN104
Y CN9801
D CN920
D CN901
Y CN9802
O 5501
CMK-P3X
IC5002
IC5001
IC5003
IC5007
IC5008


V PRIMARY ASSY
N Y6001
N Y6002
AC IN
NEUTRAL
LIVE
L CN3001
AWX7311
AWX7345
AWX7420
AWX7426
AWX7429
RISK OF FIRE-REPLACE FUSE AS MARKED.
PRIMARY ASSY
(ANP7308-B)
Q6001
IC6001

4.8 VIDEO ASSY

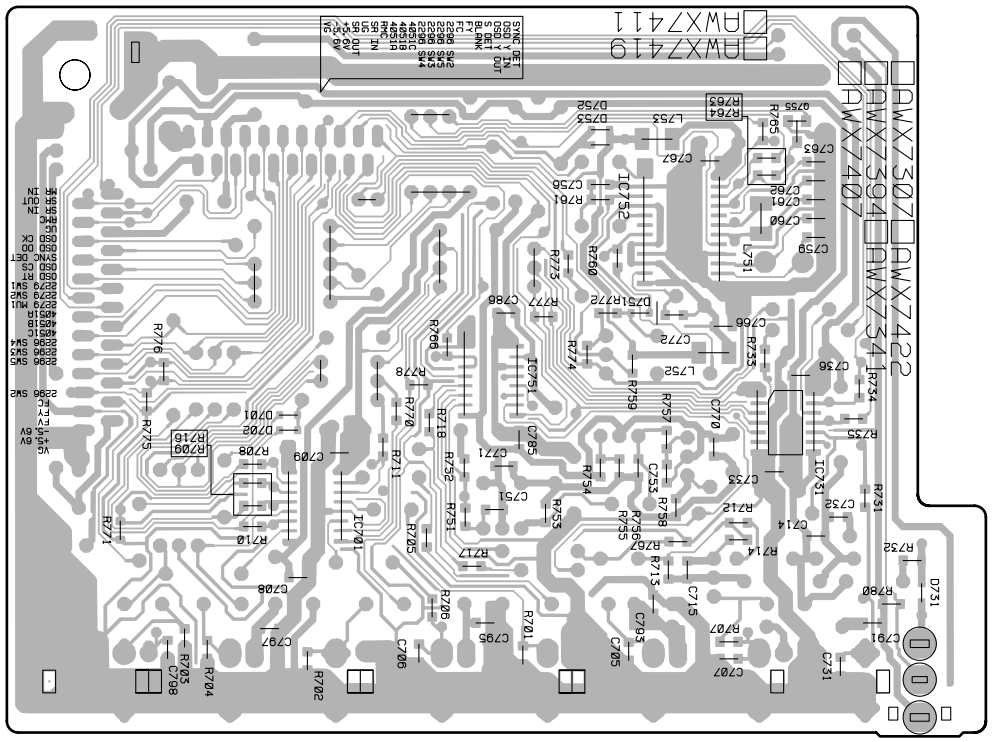
P VIDEO ASSY



SIDE A

D CN905 **Q** CN804

P VIDEO ASSY

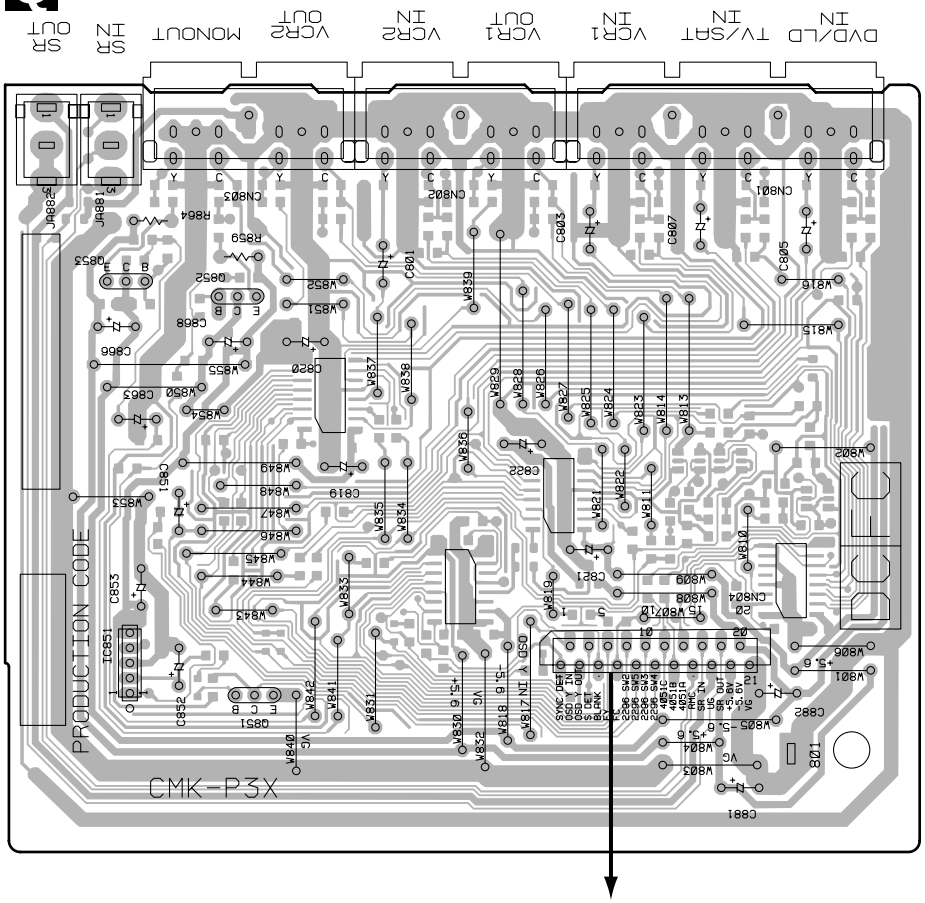


SIDE B

(ANP7307-B)

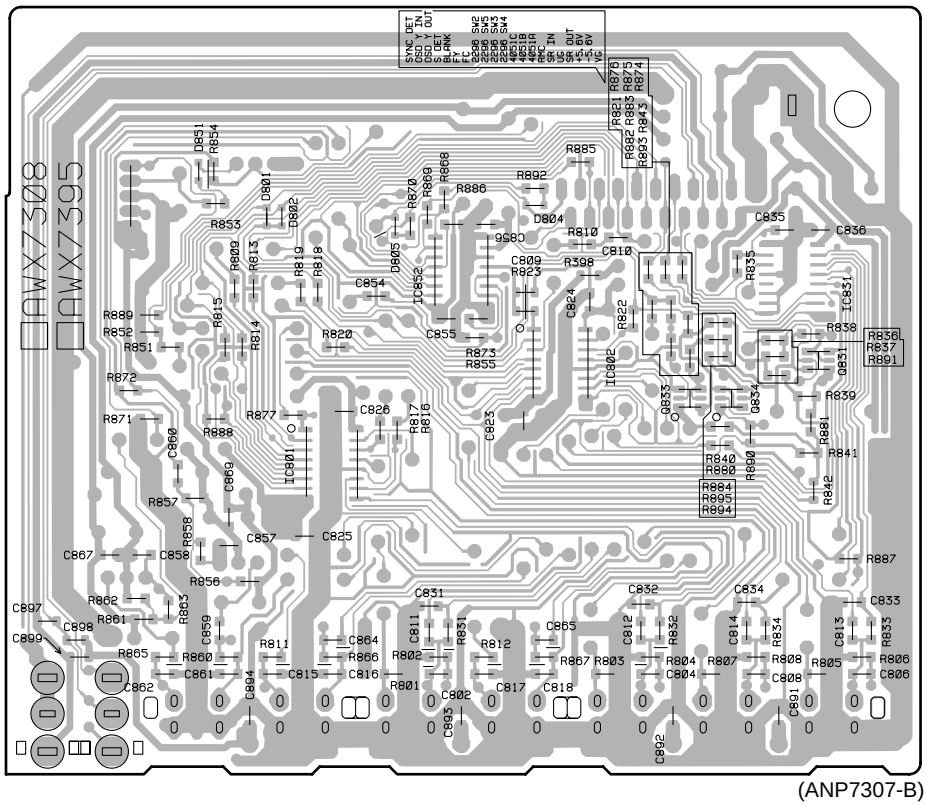
4.9 S-VIDEO ASSY

Q S-VIDEO ASSY



P CN702

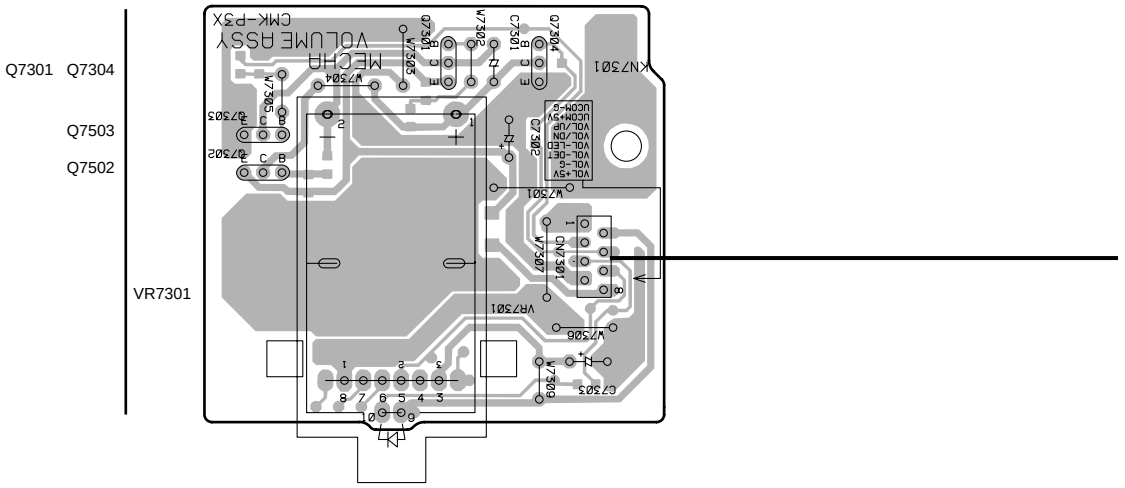
Q S-VIDEO ASSY



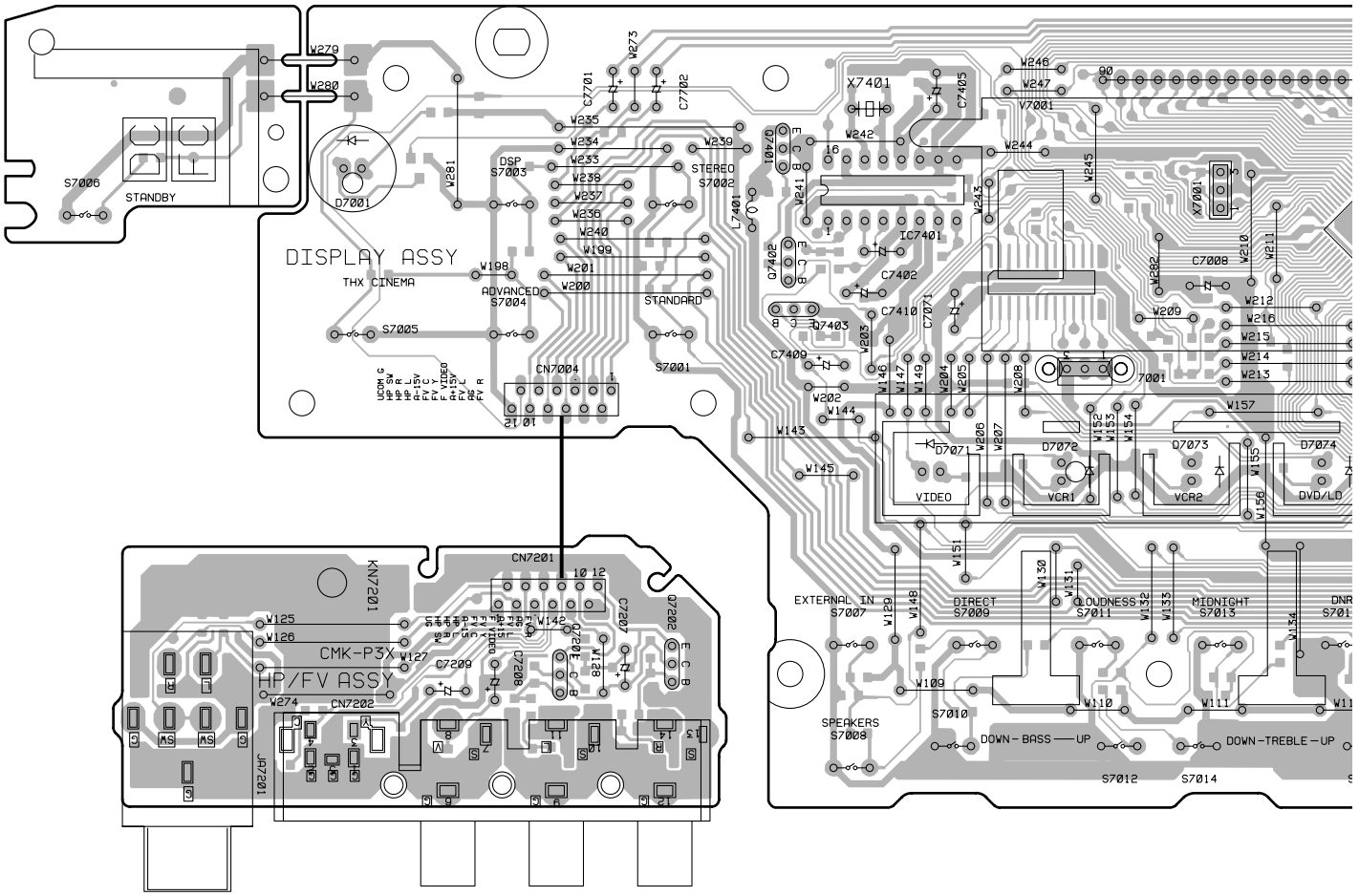
(ANP7307-B)

4.10 H. PHONE/F. VIDEO, DISPLAY, ROTARY ENCODER and VOLUME ASSYS

U VOLUME ASSY

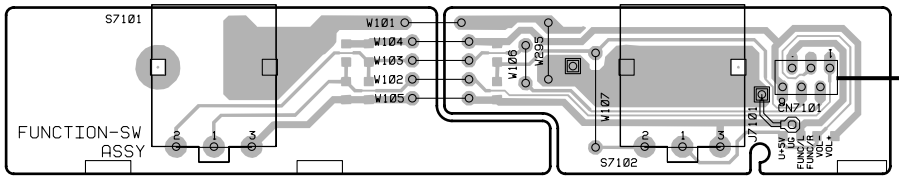


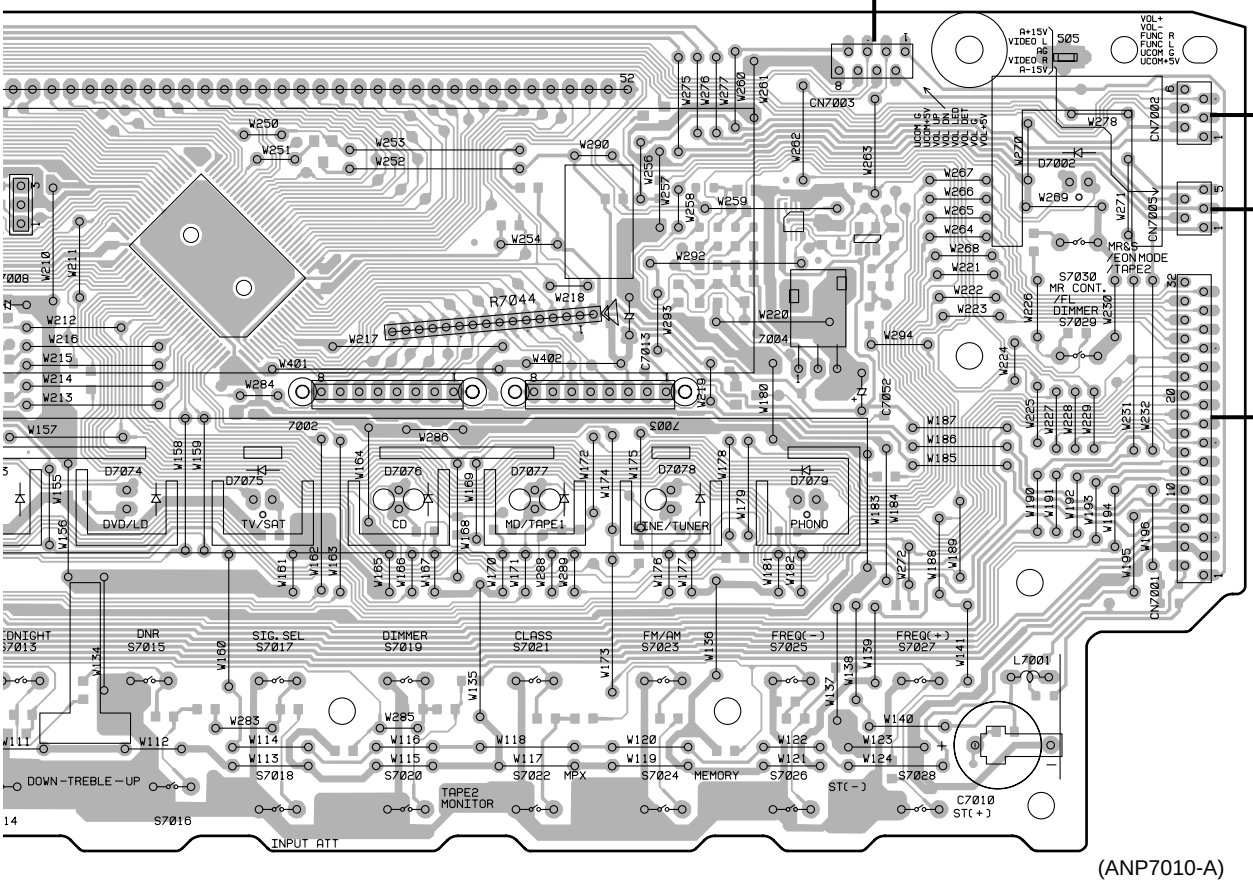
S DISPLAY ASSY



R H. PHONE/F. VIDEO ASSY

T ROTARY ENCODER ASSY



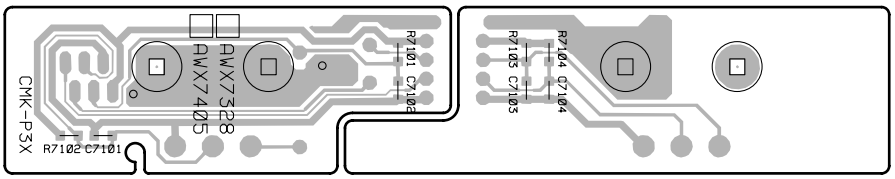


D CN906

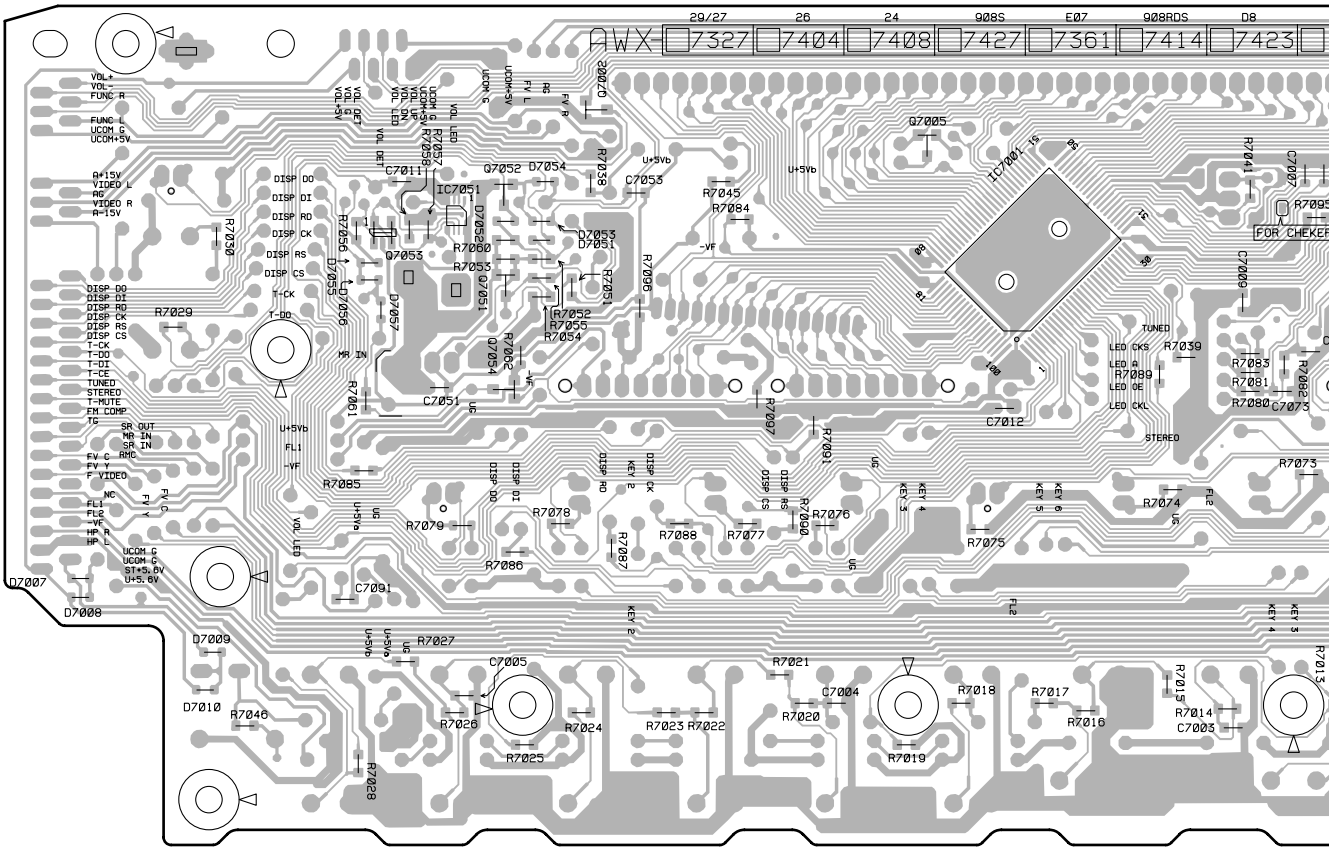
D CN904

(ANP7010-A)

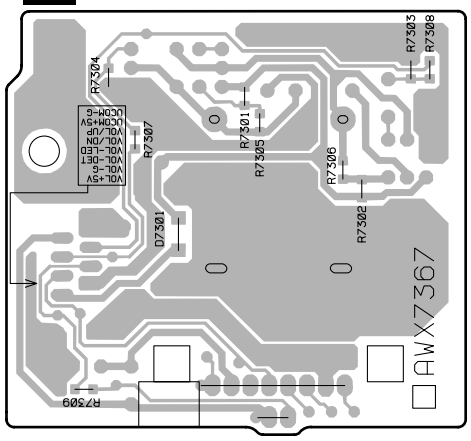
T ROTARY ENCODER ASSY



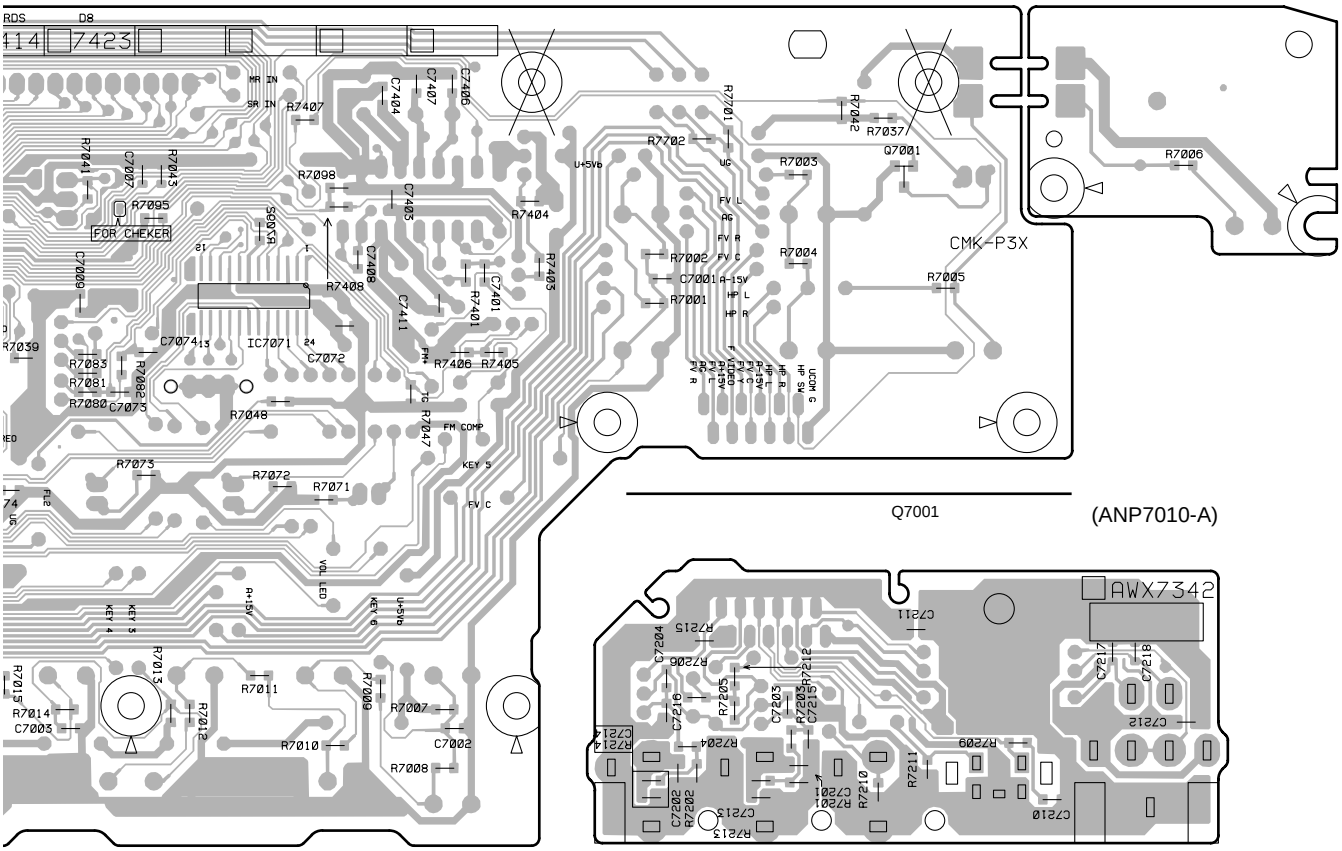
S DISPLAY ASSY



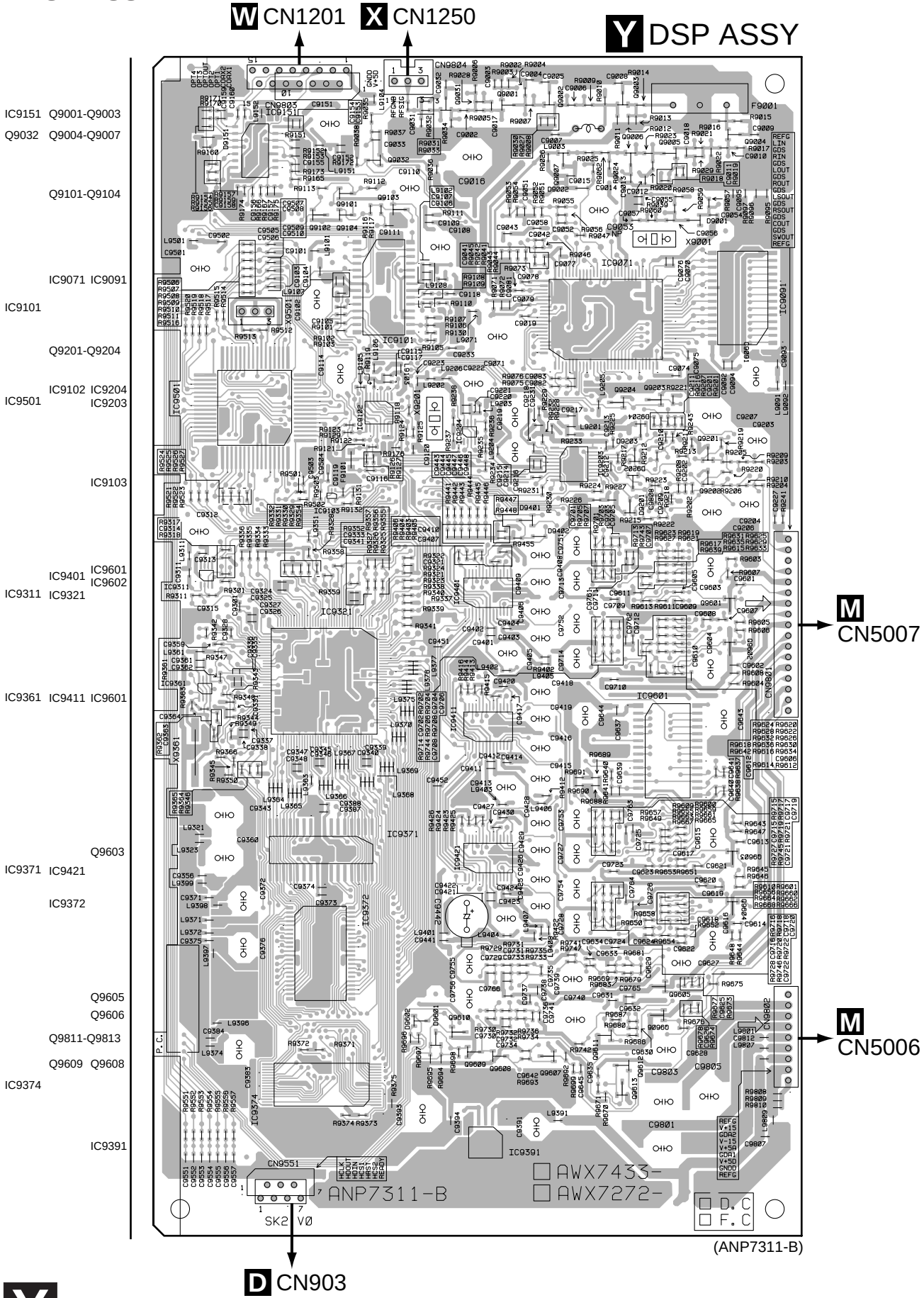
U VOLUME ASSY



R H. PHONE/F. VIDEO ASSY

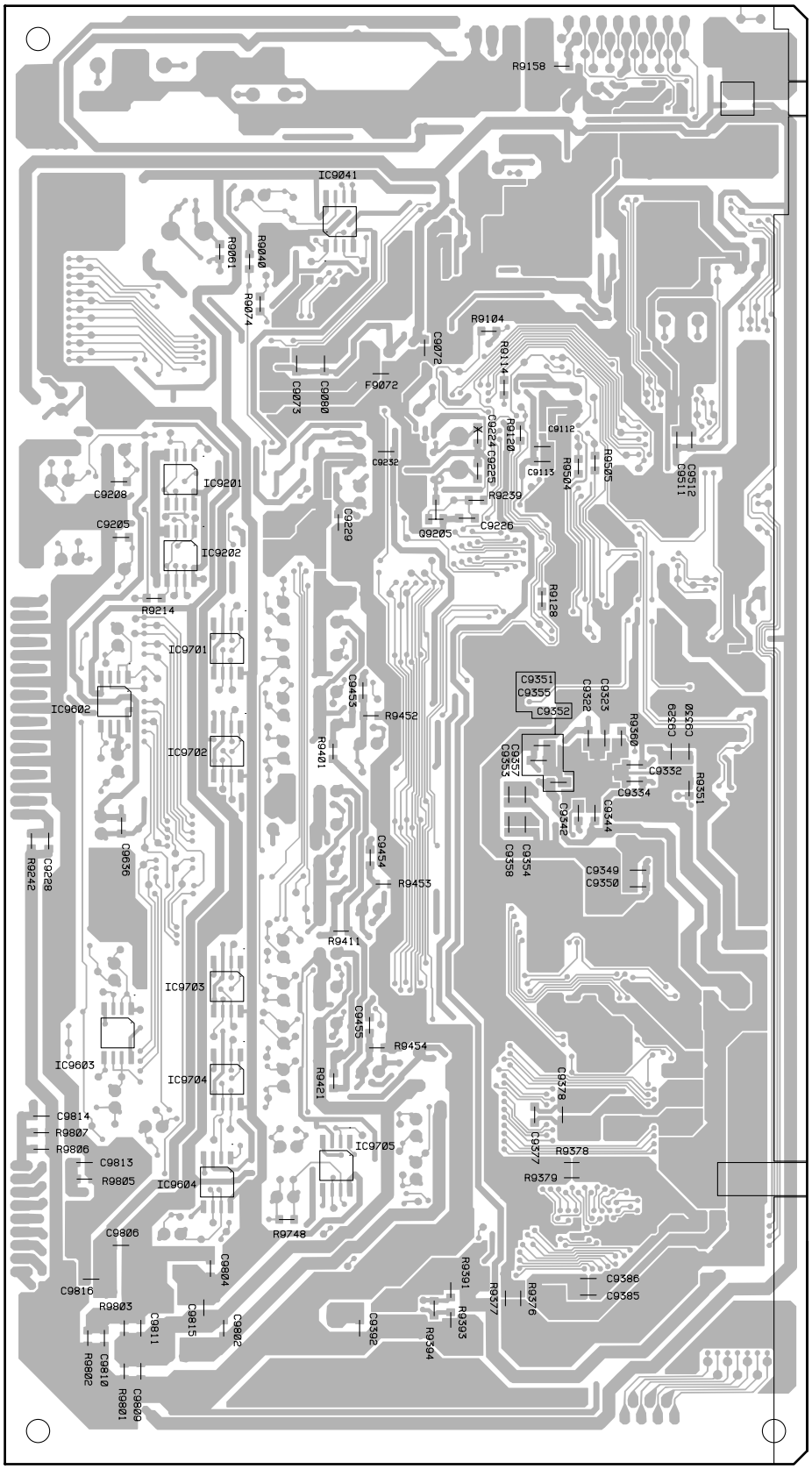


4.11 DSP ASSY


W CN1201
X CN1250
Y DSP ASSY
IC9151 Q9001-Q9003
Q9032 Q9004-Q9007
Q9101-Q9104
IC9071 IC9091
IC9101
Q9201-Q9204
IC9102 IC9204
IC9501 IC9203
IC9103
IC9401 IC9601
IC9602
IC9311 IC9321
IC9361 IC9411 IC9601
Q9603
IC9371 IC9421
IC9372
Q9605
Q9606
Q9811-Q9813
Q9609 Q9608
IC9374
IC9391
M CN5007
M CN5006
D CN903
CN9551
SK2
ANP7311-B
AWX7433-
AWX7272-
D. C
F. C
(ANP7311-B)

Y DSP ASSY

IC9041
IC9201
Q9205
IC9202
IC9701
IC9602
IC9702
IC9703
IC9603
IC9704
IC9604
IC9705



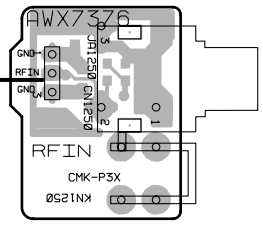
(ANP7311-B)

SIDE B

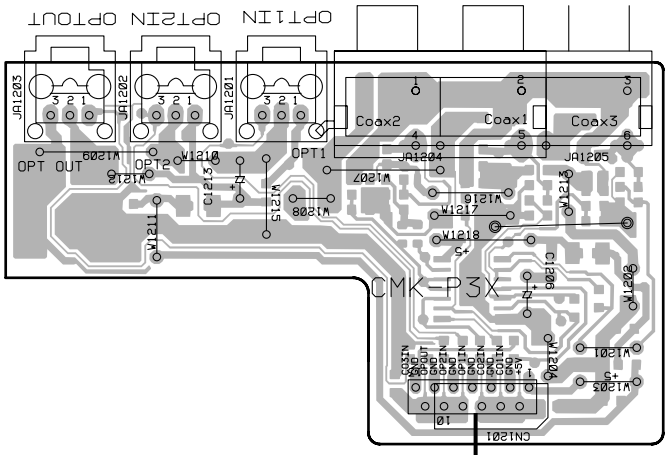
4.12 DIGITAL-I/O and RF TERMINAL ASSYS

X RF TERMINAL ASSY

Y CN9804

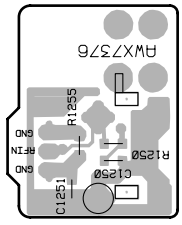


W DIGITAL-I/O ASSY

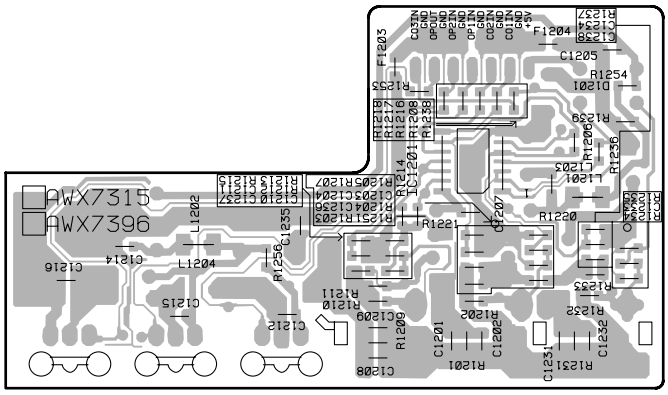


Y CN9803

SIDE A



X RF TERMINAL ASSY



W DIGITAL-I/O ASSY

(ANP7307-B)

SIDE B

5. PCB PARTS LIST

NOTES: ●*The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

●*When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56×10^1 → 561 ..... RD1/4PU 5 6 1 J
47k Ω → 47×10^3 → 473 ..... RD1/4PU 4 7 3 J
0.5 Ω → R50 ..... RN2H R 5 0 K
1 Ω → 1R0 ..... RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562×10^1 → 5621 ..... RN1/4PC 5 6 2 1 F

■LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Desacription	Part No.					Remarks
		VSX-29TX	VSX-27TX	VSX-26TX	VSX-24TX	VSX-D908S	
NSP	MAIN ASSY	AWK7496	AWK7521	AWK7525	AWK7531	AWK7537	
	├ MAIN CONTROL ASSY	AWX7306	AWX7393	AWX7399	AWX7406	AWX7424	
	├ VIDEO ASSY	AWX7307	AWX7394	AWX7394	AWX7407	AWX7394	
	├ S-VIDEO ASSY	AWX7308	AWX7395	AWX7395	AWX7395	AWX7395	
	├ DIGITAL-I/O ASSY	AWX7315	AWX7396	AWX7396	AWX7396	AWX7396	
NSP	└ RF TERMINAL ASSY	AWX7376	AWX7376	Not used	Not used	Not used	
NSP	COMPLEX ASSY	AWK7497	AWK7522	AWK7522	AWK7526	AWK7522	
	├ REGULATOR ASSY	AWX7310	AWX7310	AWX7310	AWX7310	AWX7310	
	├ PRIMARY ASSY	AWX7311	AWX7311	AWX7311	AWX7311	AWX7311	
NSP	├ A-PINJACK ASSY	AWX7312	AWX7397	AWX7397	AWX7401	AWX7397	
	├ CONNECTION ASSY	AWX7313	AWX7313	AWX7313	AWX7313	AWX7313	
NSP	├ EXTRA-5.1 ASSY	AWX7314	Not used	Not used	Not used	Not used	
NSP	├ EXTERNAL IN ASSY	Not used	AWX7398	AWX7398	AWX7398	AWX7398	
	├ TRANS 2-2 ASSY	AWX7366	AWX7366	AWX7366	AWX7366	AWX7366	
	└ TRANS 1 ASSY	AWX7316	AWX7316	AWX7316	AWX7316	AWX7316	
NSP	FRONT/VAMP ASSY	AWK7499	AWK7499	AWK7524	AWK7527	AWK7538	
	├ V-AMP ASSY	AWX7309	AWX7309	AWX7309	AWX7409	AWX7409	
	├ DISPLAY ASSY	AWX7327	AWX7327	AWX7404	AWX7408	AWX7427	
NSP	├ ROTARY ENCODER ASSY	AWX7328	AWX7328	AWX7405	AWX7405	AWX7405	
	├ H. PHONE/F. VIDEO ASSY	AWX7342	AWX7342	AWX7342	AWX7342	AWX7342	
	└ VOLUME ASSY	AWX7367	AWX7367	Not used	Not used	Not used	
NSP	POWER/CURRENT ASSY	AWK7523	AWK7523	AWK7498	AWK7498	AWK7498	
NSP	├ C-AMP-P ASSY	AWX7317	AWX7317	AWX7317	AWX7317	AWX7317	
	├ C-AMP-N ASSY	AWX7318	AWX7318	AWX7318	AWX7318	AWX7318	
NSP	├ OUTPUT-FL ASSY	AWX7319	AWX7319	AWX7319	AWX7319	AWX7319	
NSP	├ OUTPUT-FR ASSY	AWX7320	AWX7320	AWX7320	AWX7320	AWX7320	
	├ OUTPUT-C ASSY	AWX7321	AWX7321	AWX7321	AWX7321	AWX7321	
NSP	├ OUTPUT-SL ASSY	AWX7322	AWX7322	AWX7322	AWX7322	AWX7322	
NSP	├ OUTPUT-SR ASSY	AWX7323	AWX7323	AWX7323	AWX7323	AWX7323	
	├ VL-TERMINAL ASSY	AWX7324	AWX7324	AWX7324	AWX7324	AWX7324	
	├ TRANS 2-1 ASSY	AWX7326	AWX7326	AWX7326	AWX7326	AWX7326	
	├ DIODE ASSY	AWX7343	AWX7343	AWX7343	AWX7343	AWX7343	
	└ SP/PS ASSY	AWX7402	AWX7402	AWX7325	AWX7325	AWX7325	
NSP	DSP ASSY	AWX7272	AWX7272	AWX7433	AWX7433	AWX7433	

■CONTRAST OF PCB ASSEMBLIES

B A-PINJACK ASSY

AWX7312, AWX7397 and AWX7401 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.			Remarks
		AWX7312	AWX7397	AWX7401	
	CN1014 6P PIN JACK	AKB7119	Not used	Not used	
	JA1011 - JA1013 4P PIN JACK	AKB7108	AKB7048	AKB7048	
	JA1014 6P PIN JACK	Not used	Not used	AKB7050	
	JA1015 4P PIN JACK	Not used	AKB7048	Not used	
	1016 2P PIN JACK	Not used	AKB7120	Not used	

D MAIN CONTROL ASSY

AWX7306, AWX7393, AWX7399, AWX7406 and AWX7424 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.					Remarks
		AWX7306	AWX7393	AWX7399	AWX7406	AWX7424	
	IC102	BU4052BCF	BU4052BCF	BU4052BCF	Not used	BU4052BCF	
	IC110	M62429FP	M62429FP	M62429FP	Not used	M62429FP	
	C145, C146	CEAT100M50	CEAT100M50	CEAT100M50	Not used	CEAT100M50	
	C960, C961	CCSQCH101J50	CCSQCH101J50	CCSQCH101J50	Not used	CCSQCH101J50	
	R133, R134	RS1/10S102J	RS1/10S102J	RS1/10S102J	Not used	RS1/10S102J	
	R320, R322, R335, R336	Not used	Not used	Not used	RS1/10S0R0J	Not used	
	R325-R330	RS1/10S0R0J	RS1/10S0R0J	RS1/10S0R0J	Not used	RS1/10S0R0J	
	R921	Not used	Not used	RS1/10S103J	Not used	RS1/10S103J	
	R922	RS1/10S103J	RS1/10S103J	Not used	RS1/10S103J	Not used	
	R923	Not used	RS1/10S103J	Not used	Not used	RS1/10S103J	
	R924	RS1/10S103J	Not used	RS1/10S103J	RS1/10S103J	Not used	
	R925	RS1/10S103J	Not used	Not used	Not used	RS1/10S103J	
	R926	Not used	RS1/10S103J	RS1/10S103J	RS1/10S103J	Not used	
	R934-R936, R986, R987	RS1/10S102J	RS1/10S102J	RS1/10S102J	Not used	RS1/10S102J	
	CN911 4P PIN JACK	Not used	Not used	Not used	AKB7015	Not used	
	CN941 4P PIN JACK	Not used	AKB7015	AKB7015	AKB7015	AKB7015	
	JA911 2P PIN JACK	Not used	DKB1045	DKB1045	Not used	DKB1045	
	JA931 2P PIN JACK	Not used	VKB1060	VKB1060	Not used	VKB1060	
	103 6P PIN JACK	AKB7088	Not used	Not used	Not used	Not used	
	113 6P PIN JACK	Not used	AKB7089	AKB7089	AKB7089	AKB7089	
	JA901, JA911 4P PIN JACK	AKB7075	Not used	Not used	Not used	Not used	

E V-AMP ASSY

AWX7309 and AWX7409 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.		Remarks
		AWX7309	AWX7409	
	IC7502, IC7522, IC7542, IC7602, IC7622	NJM4558MD	Not used	
	Q7501, Q7521, Q7541, Q7601, Q7621	2SC2878	Not used	
	D7501, D7502, D7521, D7522, D7541, D7542	1SS355	Not used	
	D7601, D7602, D7621, D7622	1SS355	Not used	
	D7503, D7504, D7523, D7524, D7543, D7544	HZU2CLL	Not used	
	D7603, D7604, D7623, D7624	HZU2CLL	Not used	
	C7505, C7525, C7545, C7605, C7625	CCSQCH220J50	Not used	
	C7506, C7526, C7546, C7606, C7626	CEAT4R7M50	Not used	
	C7510, C7530, C7550, C7610, C7630	CKSQYB104K25	Not used	
	R7504, R7524, R7544, R7604, R7624	RS1/10S103J	RS1/10S0R0J	
	R7509, R7529, R7549, R7609, R7629	RS1/10S103J	Not used	
	R7507, R7508, R7510, R7527, R7528, R7530	RS1/10S334J	Not used	
	R7547, R7548, R7550, R7607, R7608, R7610	RS1/10S334J	Not used	
	R7627, R7628, R7630	RS1/10S334J	Not used	
	R7511, R7531, R7551, R7611, R7631	RS1/10S102J	Not used	
	R7512, R7513, R7516, R7517, R7532, R7533	RS1/10S473J	Not used	
	R7536, R7537, R7552, R7553, R7556, R7557	RS1/10S473J	Not used	
	R7612, R7613, R7616, R7617, R7632, R7633	RS1/10S473J	Not used	
	R7636, R7637	RS1/10S473J	Not used	
	R7514, R7534, R7554, R7614, R7634	RS1/10S101J	Not used	
	R7515, R7518, R7535, R7538, R7555, R7558	RS1/10S105J	Not used	
	R7615, R7618, R7635, R7638	RS1/10S105J	Not used	
	R7641	RS1/10S914J	Not used	
	R7653 - R7656, R7663 - R7666, R7673 - R7676	RS1/10S0R0J	Not used	
	R7683 - R7686, R7693 - R7696	RS1/10S0R0J	Not used	

L SP/PS ASSY

AWX7402 and AWX7325 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.		Remarks
		AWX7402	AWX7325	
	D3052, D3054, D3056, D3058, D3060	1SS133	Not used	
	C3001, C3002	ACH7129	ACH7130	
	C3101 - C3105	CFTYA224J50	CFTYA104J50	
	C3106 - C3110	CFTYA224J50	Not used	

P VIDEO ASSY

AWX7307, AWX7394 and AWX7407 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.			Remarks
		AWX7307	AWX7394	AWX7407	
	IC731	NJM2279M	NJM2279M	Not used	
	C732, C733, C736	CKSQYB473K50	CKSQYB473K50	Not used	
	R733 - R735	RS1/10S102J	RS1/10S102J	Not used	
	JA701 3P PIN JACK	AKB7109	Not used	AKB7056	
	JA703 3P PIN JACK	AKB7116	AKB7115	AKB7115	
	702 2P PIN JACK	AKB7076	AKB7017	AKB7017	
	707 1P PIN JACK	Not used	AKB7020	Not used	

Q S-VIDEO ASSY

AWX7308 and AWX7395 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.		Remarks
		AWX7308	AWX7395	
	CN801 4P MINI DIN SOCKET	Not used	AKP7043	
	CN802, CN803 4P MINI DIN SOCKET	AKP7023	AKP7020	
	JA801 4P MINI DIN SOCKET	AKP7049	Not used	

S DISPLAY ASSY

AWX7327, AWX7404, AWX7408 and AWX7427 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.				Remarks
		AWX7327	AWX7404	AWX7408	AWX7427	
	IC7071	M66311FP	Not used	Not used	Not used	
	Q7002, Q7054	DTC124EK	DTC124EK	Not used	DTC124EK	
	D7002	SLR-343DC(NPQ)	SLR-343DC(NPQ)	Not used	SLR-343DC(NPQ)	
	D7071 - D7079	SLR-343VR(MNP)	Not used	Not used	Not used	
	S7017	VSG1009	VSG1009	VSG1009	Not used	
	S7019, S7020	VSG1009	VSG1009	Not used	Not used	
	C7011, C7073, C7074	CKSQYB102K50	Not used	Not used	Not used	
	C7071	CEAL101M6R3	Not used	Not used	Not used	
	C7072	CKSQYB473K50	Not used	Not used	Not used	
	R7038	RS1/10S271J	RS1/10S271J	Not used	RS1/10S271J	
	R7061	RS1/10S103J	RS1/10S103J	Not used	RS1/10S103J	
	R7071 - R7079	RS1/10S271J	Not used	Not used	Not used	
	R7080 - R7083	RS1/10S102J	Not used	Not used	Not used	
	R7092	RS1/10S473J	Not used	Not used	Not used	
	CN7003 8P FFC CONNECTOR	52045-0845	Not used	Not used	Not used	

T ROTARY ENCODER ASSY

AWX7328 and AWX7405 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.		Remarks
		AWX7328	AWX7405	
	S7101	Not used	ASX7004	
	C7103, C7104	Not used	CKSQYB103K50	
	R7103, R7104	Not used	RS1/10S103J	

Y DSP ASSY

AWX7272 and AWX7433 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.		Remarks
		AWX7272	AWX7433	
	IC9041	NJM4558MD	Not used	
	IC9071	PM4007A	Not used	
	IC9091	SRM2B256SLMX70	Not used	
	Q9001, Q9002, Q9004 - Q9006, Q9031	2SC3082K (NP)	Not used	
	Q9003, Q9032	2PD601A (QR)	Not used	
	Q9007	2PB709A (QR)	Not used	
	D9001	KV1851	Not used	
	D9002	1SS355	Not used	
	F9001	ATF7001	Not used	
	L9003	ATH7001	Not used	
	L9071	ATL7002	Not used	
	L9091	QTL1013	Not used	
	C9002 - C9006, C9008 - C9013, C9015, C9017	CKSQYF104Z16	Not used	
	C9018, C9031, C9032, C9043, C9051, C9052	CKSQYF104Z16	Not used	
	C9055, C9058, C9074, C9075, C9077 - C9079	CKSQYF104Z16	Not used	
	C9081, C9092	CKSQYF104Z16	Not used	
	C9007	CCSRCH750J50	Not used	
	C9014, C9054, C9056, C9070	CKSRYB103K50	Not used	
	C9016	CEJA470M25	Not used	
	C9033	CCSRCH101J50	Not used	
	C9041, C9042	CKSRYF105Z10	Not used	
	C9053	CEJANP4R7M25	Not used	
	C9057	CCSRCH270J50	Not used	
	C9071	CEJA101M10	Not used	
	C9073, C9080	CKSQYF104Z25	Not used	
	C9076	CCSRCH271J50	Not used	
	C9091	CEJA470M16	Not used	
	C9095	CCSRCH221J50	Not used	
	R9002, R9010, R9011, R9018, R9038, R9053	RS1/16S103J	Not used	
	R9054, R9071, R9072	RS1/16S103J	Not used	
	R9003, R9019	RS1/16S512J	Not used	
	R9004, R9015, R9016, R9020	RS1/16S202J	Not used	
	R9005, R9006, R9014, R9021, R9022, R9025	RS1/16S102J	Not used	
	R9073	RS1/16S102J	Not used	
	R9007, R9023, R9033	RS1/16S220J	Not used	
	R9008, R9027, R9030	RS1/16S302J	Not used	
	R9009, R9074	RS1/16S221J	Not used	
	R9013, R9017, R9034	RS1/16S152J	Not used	
	R9024, R9026	RS1/16S332J	Not used	
	R9028, R9029	RS1/16S561J	Not used	
	R9031, R9032	RS1/16S333J	Not used	
	R9035	RS1/16S223J	Not used	
	R9036	RS1/16S0R0J	Not used	
	R9037, R9039	RS1/16S274J	Not used	
	R9040	Not used	RS1/10S102J	
	R9041	RS1/16S472J	Not used	
	R9042, R9044, R9062	RS1/16S392J	Not used	
	R9043	RS1/16S273J	Not used	
	R9046	RS1/16S104J	Not used	
	R9047	RS1/16S432J	Not used	
	R9051	RS1/16S393J	Not used	
	R9052	RS1/16S243J	Not used	
	R9055	RS1/16S121J	Not used	
	R9056	RS1/16S683J	Not used	
	R9057 - R9059	RS1/16S473J	Not used	

Mark	Symbol and Desacription	Part No.		Remarks
		AWX7272	AWX7433	
	R9061	RS1/16S471J	Not used	
	R9075, R9076	RS1/16S101J	Not used	
	R9153	Not used	RS1/16S0R0J	
	CN9804 3P PLUG	KM250MA3	Not used	
	X9001 CRYSTAL RESONATOR (18.432MHz)	ASS7009	Not used	

W DIGITAL-I/O ASSY

AWX7315 and AWX7396 are constructed the same except for the following :

Mark	Symbol and Desacription	Part No.		Remarks
		AWX7315	AWX7396	
	JA1204 2P PIN JACK	AKB7121	AKB7095	

Mark	No.	Description	Part No.

A EXTRA-5.1 ASSY

CAPACITORS

C1107-C1112	CEAT4R7M50
C1113-C1115	CKCYF103Z50

RESISTORS

All Resistors	RD1/4PU□□□J

OTHERS

JA1101-JA1103 2P PIN JACK	AKB7121
CN1101 8P SOCKET	KP200TA8L

A EXTERNAL IN ASSY

CAPACITORS

C1107-C1112	CEAT4R7M50
C1113-C1115	CKCYF103Z50

RESISTORS

All Resistors	RD1/4PU□□□J

OTHERS

JA1101-JA1103	AKB7095
CN1101 8P SOCKET	KP200TA8L

B A-PINJACK ASSY

CAPACITORS

C1019-C1022	CKCYF103Z50

RESISTORS

All Resistors	RD1/4PU□□□J

OTHERS

JA1011-JA1013 4P PIN JACK	AKB7108
CN1014 6P PIN JACK	AKB7119
CN1001 18P SOCKET	KP200TA18L
CN1002 4P SOCKET	KP200TA4L

Mark	No.	Description	Part No.

C CONNECTION ASSY

SEMICONDUCTORS

IC1351	M5220P
IC1301-IC1303	NJM4558D-D

CAPACITORS

C1351,C1352	CEAT100M50
C1365,C1366	CEAT101M16
C1363,C1364	CEAT2R2M50
C1357,C1358	CEAT470M25
C1307-C1312	CEAT4R7M50
C1313-C1318	CKCYF103Z50
C1361,C1362	CQMA242J50
C1359,C1360	CQMBA822J50

RESISTORS

All Resistors	RD1/4PU□□□J

OTHERS

CN1351 18P PLUG	KM200TA18
CN1352 4P PLUG	KM200TA4
CN1301 8P PLUG	KM200TA8
CN1302 10P SOCKET	KP200TA10L
CN1353 20P SOCKET	KP200TA20L

D MAIN CONTROL ASSY

SEMICONDUCTORS

IC102	BU4052BCF
IC110	M62429FP
IC103,IC105,IC109	NJM4558MD
IC901	PD5506A
IC104,IC107	TC9163AF
IC101	TC9274N-001
IC108	TC9482N
IC112	UPC4570G2
IC113,IC114	UPC4570HA
Q991	2SC1740S
Q251,Q252	2SC2412K
Q113,Q114,Q271,Q272	2SC2878
Q902-Q905	DTA124EK
Q901	DTC143EK
Q107-Q112	HN1C03F

Mark	No.	Description	Part No.
	D254,D255,D901-D910,D991		1SS355
	D995		UDZ11B
	D201,D202,D256		UDZS5.1B

COIL

	L901	CHIP COIL	LCTA2R2J3225

CAPACITORS

	C902	ACH7058
	C951-C964	CCSQCH101J50
	C157,C158,C167,C168,C177	CCSQCH560J50
	C111,C112,C117,C118	CEAT100M50
	C127-C130,C141,C142	CEAT100M50
	C145,C146,C149,C150	CEAT100M50
	C153,C154,C159,C160	CEAT100M50
	C163,C164,C169,C170	CEAT100M50
	C173,C174,C179,C180	CEAT100M50
	C255,C256,C277,C278	CEAT100M50
	C123-C126,C991	CEAT101M16
	C147,C148,C257	CEAT1R0M50
	C903	CEAT221M10
	C121,C122	CEAT221M16
	C905	CEAT2R2M50
	C915	CEAT331M10
	C107,C108,C115,C116	CKSQYB103K50
	C133-C140,C143,C144	CKSQYB103K50
	C161,C162,C279,C280,C901	CKSQYB103K50
	C904,C908,C909,C914,C919	CKSQYB103K50
	C965	CKSQYB103K50
	C273,C274	CKSQYB104K25
	C275,C276	CKSQYB332K50
	C178	CKSQYB333K50
	C271,C272	CKSQYB472K50
	C910,C912	CKSQYB473K50
	C906	CKSQYF105Z16
	C992	CKSQYF225Z16

RESISTORS

	R948	RA12T473J
	R913	RA5T103J
	R949	RA8T103J
	R109	RD1/2VM391J
	Other Resistors	RS1/10S□□□J

OTHERS

	X901	CERAMIC RESONATOR (4.19MHz)	ASS1018
	CN903	7P FFC CONNECTOR	52044-0745
	CN902	13P FFC CONNECTOR	52044-1345
	CN906	5P FFC CONNECTOR	52045-0545
	CN105	23P FFC CONNECTOR	52045-2345
	CN905	26P FFC CONNECTOR	52045-2645
	CN904	32P FFC CONNECTOR	52045-3245
	CN901,CN911	4P PIN JACK	AKB7075
	103	6P PIN JACK	AKB7088
	CN103	10P PLUG	KM200TA10
	CN101	20P PLUG	KM200TA20
	CN104	16P SOCKET	KP200IA16L
	CN901	15P SOCKET	KP200TA15L
	CN920	7P SOCKET	KP200TA7L
	CN108	9P SOCKET	KP200TA9L
	909,912,913	PCB BINDER	VEF1040

Mark	No.	Description	Part No.

E V-AMP ASSY

SEMICONDUCTORS

	IC581	BU4052BCF
	IC7502,IC7522,IC7542,IC7602,IC7622	NJM4558MD
	IC7501,IC7521,IC7541,IC7601,IC7621	UPC4570G2
	Q503,Q523,Q543,Q603,Q623	2SA1048
⚠	Q506,Q509,Q526,Q529,Q546	2SA970
⚠	Q549,Q606,Q609,Q626,Q629	2SA970
⚠	Q507,Q508,Q527,Q528	2SC2240
⚠	Q547,Q548,Q607,Q608	2SC2240
	Q561	2SC2240
⚠	Q627,Q628	2SC2240
	Q510,Q530,Q550,Q610,Q630	2SC2878
	Q7501,Q7521,Q7541,Q7601,Q7621	2SC2878
	Q501,Q521,Q541,Q601,Q621	FMS3
	Q504,Q524,Q544,Q604,Q624	FMW4
	D501,D502,D504,D505	1SS355
	D521,D522,D524,D525	1SS355
	D541,D542,D544,D545	1SS355
	D581-D588,D601,D602	1SS355
	D604,D605,D621,D622	1SS355
	D624,D625,D7501,D7502	1SS355
	D7521,D7522,D7541,D7542	1SS355
	D7601,D7602,D7621,D7622	1SS355
	D7503,D7504,D7523,D7524	HZU2CLL
	D7543,D7544,D7603,D7604	HZU2CLL
	D7623,D7624	HZU2CLL
	D503,D523,D543,D603,D623	UDZS6.8B
⚠	D506,D526,D546,D606,D626	UDZS8.2B

CAPACITORS

C511,C512,C531,C532	CCCSL181K2H
C551,C552,C611,C612	CCCSL181K2H
C631,C632	CCCSL181K2H
C509,C529,C549,C609,C629	CCCSL5R0C2H
C504,C524,C544,C604,C624	CCSQCH101J50
C7504,C7505,C7524,C7525	CCSQCH220J50
C7544,C7545,C7604,C7605	CCSQCH220J50
C7624,C7625	CCSQCH220J50
C502,C522,C542,C602,C622	CCSQCH221J50
C506,C507,C526,C527	CCSQSL560J50
C546,C547,C606,C607	CCSQSL560J50
C626,C627	CCSQSL560J50
C7501,C7521,C7541,C7601,C7621	CEAT100M50
C505,C508,C525,C528,C545	CEAT101M16
C548,C605,C608,C625,C628	CEAT101M16
C510,C530,C550,C610,C630	CEAT470M16
C513,C533,C553,C568,C569	CEAT470M50
C613,C633	CEAT470M50
C501,C521,C541,C601,C621	CEAT4R7M50
C7506,C7526,C7546,C7606,C7626	CEAT4R7M50
C7502,C7503,C7510,C7512	CKSQYB104K25
C7522,C7523,C7530,C7532	CKSQYB104K25
C7542,C7543,C7550,C7552	CKSQYB104K25
C7602,C7603,C7610,C7612	CKSQYB104K25
C7622,C7623,C7630,C7632	CKSQYB104K25
C561-C565	CKSQYB222K50
C503,C523,C543,C603,C623	CKSQYB332K50
C570	CKSQYF223Z50
C581,C582	CKSQYF225Z16

Mark	No.	Description	Part No.
RESISTORS			
	R518,R538,R558,R618,R638		RD1/4MUF473J
⚠	R513,R514,R533,R534		RS1/10S121J
⚠	R553,R554,R613,R614		RS1/10S121J
⚠	R633,R634		RS1/10S121J
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN501	23P FFC CONNECTOR	52045-2345
	CN502	28P FFC CONNECTOR	52045-2845
	CN504	3P PLUG	KM250MA3
	505,506	PCB BINDER	VEF1040

F C-AMP-N ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
	Q2503,Q2523,Q2543,Q2603,Q2623		2SA970
	Q2001,Q2002		2SC1740S
	Q2502,Q2522,Q2542,Q2602,Q2622		2SC4137
⚠	Q2501,Q2521,Q2541,Q2601,Q2621		IRF540A
	D2501-D2504,D2521-D2524		1SS133
	D2541-D2544,D2601-D2604		1SS133
	D2621-D2624		1SS133
CAPACITORS			
	C2501,C2521,C2541,C2601,C2621		CEANPR22M50
	C2001		CEAT101M10
RESISTORS			
⚠	R2506,R2510,R2526,R2530,R2546		RD1/4PUF391J
⚠	R2550,R2606,R2610,R2626,R2630		RD1/4PUF391J
⚠	R2501,R2521,R2541,R2601,R2621		RD1/4PUF470J
	VR2501,VR2521,VR2541,VR2601 (22Ω)		RCP1134
	VR2621 (22Ω)		RCP1134
	Other Resistors		RD1/4PU□□□J
OTHERS			
	CN2001	28P FFC CONNECTOR	52045-2845
	CN2501,CN2521,CN2541,CN2601	7P PLUG	KM250NA7L
	CN2621	8P PLUG	KM250NA8L

G C-AMP-P ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
⚠	Q2504,Q2524,Q2544,Q2604,Q2624		IRF9540A
RESISTORS			
⚠	R2511,R2531,R2551,R2611,R2631		RD1/4PUF470J
OTHERS			
	CN2504,CN2524,CN2544,CN2604	5P PLUG	KM250NA5L
	CN2624	5P PLUG	KM250NA5L

HA OUTPUT-SL ASSY

Mark	No.	Description	Part No.
RESISTOR			
⚠	R2612 (0.05Ω/5W)		ACN7097
OTHERS			
	CN2603	5P SOCKET	KP250NA5
	CN2602	7P SOCKET	KP250NA7

HB OUTPUT-FL ASSY

Mark	No.	Description	Part No.
RESISTOR			
⚠	R2512 (0.05Ω/5W)		ACN7097
OTHERS			
	CN2503	5P SOCKET	KP250NA5
	CN2502	7P SOCKET	KP250NA7

HC OUTPUT-C ASSY

Mark	No.	Description	Part No.
RESISTOR			
⚠	R2552 (0.05Ω/5W)		ACN7097
OTHERS			
	CN2543	5P SOCKET	KP250NA5
	CN2542	7P SOCKET	KP250NA7

HD OUTPUT-FR ASSY

Mark	No.	Description	Part No.
RESISTOR			
⚠	R2532 (0.05Ω/5W)		ACN7097
OTHERS			
	CN2523	5P SOCKET	KP250NA5
	CN2522	7P SOCKET	KP250NA7

HE OUTPUT-SR ASSY

Mark	No.	Description	Part No.
RESISTOR			
⚠	R2632 (0.05Ω/5W)		ACN7097
OTHERS			
	CN2623	5P SOCKET	KP250NA5
	CN2622	8P SOCKET	KP250NA8

I VL-TERMINAL ASSY

Mark	No.	Description	Part No.
CAPACITORS			
	C2011,C2012		CEAT1R0M2A
OTHERS			
	KN2011,KN2012	GROUND PLATE	ANK-142

Mark	No.	Description	Part No.

J TRANS 2-1 ASSY

SEMICONDUCTORS

⚠	IC4501,IC4502 (2.5A)		AEK7014
⚠	Q4502		2SA1837
⚠	Q4501		2SC4793
	Q4504		DTA143ES
	Q4505		DTC124ES
	Q4503		DTC143ES
	D4509,D4510		MTZJ12B
	D4513		MTZJ16B
	D4505-D4508		MTZJ20A
⚠	D4501-D4504		S5688G
	D4511,D4512		S5688G

CAPACITORS

C4509,C4510		CEAT101M50
C4507,C4508		CEAT471M63

RESISTORS

⚠	R4509,R4510	RD1/4PMF332J
	Other Resistors	RD1/4PU□□□J

OTHERS

4001	9P CABLE HOLDER	51048-0900
H4501-H4504	FUSE CLIP	AKR1004
4501,4502	HEAT SINK	ANH-309
4503,4504	SCREW	BPZ30P080FZK

K DIODE ASSY

SEMICONDUCTORS

⚠	D3001,D3002	D5SBA20(B)

L SP/PS ASSY

SEMICONDUCTORS

	Q3005,Q3156-Q3159	DTA124ES
	Q3151-Q3155	DTC143ES
	D3051-D3060	1SS133

COILS

L3101-L3105	AF CHOKE COIL	ATH1053

RELAYS

	RY3101-RY3105	ASR7014

CAPACITORS

	C3001,C3002 (22000µF/56V)	ACH7129
	C3118	CEAT100M50
	C3101-C3110	CFTYA224J50
	C3111-C3117	CQHA102J2A

RESISTORS

	R3151-R3155	RD1/2PM331J
⚠	R3101-R3105	RD1/4PMF4R7J
⚠	R3106-R3110	RS1LMF4R7J
⚠	R3131,R3132	RS2LMF331J
	Other Resistors	RD1/4PM□□□J

OTHERS

3004	8P CABLE HOLDER	51048-0800
3001	9P CABLE HOLDER	51048-0900
CN3003	14P FFC CONNECTOR	52045-1445
CN3101	8P SPEAKER TERMINAL	AKE7033
CN3102	6P SPEAKER TERMINAL	AKE7034
J3002	JUMPER WIRE 8P	D20PYY0825E
J3001	JUMPER WIRE 9P	D20PYY0915E
CN3001	4P PLUG	KM200TA4
KN3001	EARTH METAL FITTING	VNF1084

M REGULATOR ASSY

SEMICONDUCTORS

⚠	IC5009,IC5010 (200mA)	AEK7023
⚠	IC5004,IC5008	NJM78M05FA
⚠	IC5003	NJM78M12FA
⚠	IC5001	NJM78M15FA
⚠	IC5005,IC5007	NJM78M56FA
⚠	IC5006	NJM79M05FA
⚠	IC5002	NJM79M15FA
	D5010	1SS133
⚠	D5009	D3SBA20(B)
	D5012-D5014	MTZJ10C
	D5011	MTZJ5.1B
⚠	D5001-D5008,D5015-D5017	S5688G

CAPACITORS

C5015,C5017,C5019,C5021,C5023	CEAT101M10
C5009,C5011,C5013,C5025	CEAT101M25
C5024	CEAT101M50
C5026	CEAT221M35
C5027,C5028	CEAT221M50
C5001,C5003,C5006	CEAT222M25
C5002,C5004	CEAT222M35
C5005	CEAT332M25
C5007	CEAT472M16
C5008,C5010,C5012,C5014,C5016	CKCYF103Z50
C5018,C5020,C5022	CKCYF103Z50

RESISTORS

R5001-R5003	RD1/2PM620J

OTHERS

5009	4P CABLE HOLDER	51048-0400
CN5002	14P FFC CONNECTOR	52045-1445
CN5001	8P JUMPER CONNECTOR	52147-0810
J5000	BOARD IN WIRE	DB022ND0
CN5004	16P PLUG	KM200IA16
CN5005	15P PLUG	KM200TA15
CN5007	17P PLUG	KM200TA17
CN5008	7P PLUG	KM200TA7
CN5003,CN5006	9P PLUG	KM200TA9
KN5001,KN5002	EARTH METAL FITTING	VNF1084

N TRANS 1 ASSY

TRANS 1 Assy has no service parts.

Mark	No.	Description	Part No.

O TRANS 2-2 ASSY

SEMICONDUCTOR

⚠	IC5501 (4A)		AEK7018

OTHERS

	5501	4P CABLE HOLDER	51048-0400

P VIDEO ASSY

SEMICONDUCTORS

	IC751		BU4053BCF
	IC752		LC74782M-9011
	IC731		NJM2279M
	IC701		NJM2296M
	Q701		2SA933S
	Q751-Q754		2SC1740S
	Q755		DTC124EK
	D701,D702,D731,D751-D753		1SS355

COILS

	L752,L753	CHIP COIL	LCTA100J3225
	L751	CHIP COIL	LCTA330J3225

CAPACITORS

	C753		CCSQCH100D50
	C763,C772		CCSQCH101J50
	C715,C759		CCSQCH150J50
	C760		CCSQCH180J50
	C705-C707,C731		CCSQCH181J50
	C761,C762		CCSQCH240J50
	C754		CEAT100M50
	C701-C704,C710-C712		CEAT101M10
	C734,C735,C755,C764,C765		CEAT101M10
	C781-C784		CEAT101M10
	C713,C768,C769		CEAT101M16
	C757		CEAT1R0M50
	C752		CEAT330M16
	C791,C795,C797		CKSQYB103K50
	C756		CKSQYB122K50
	C708,C709,C714,C732,C733		CKSQYB473K50
	C736,C766,C767,C770,C771		CKSQYB473K50
	C785,C786,C793		CKSQYB473K50

RESISTORS

	R715		RD1/2VM201J
	Other Resistors		RS1/10S□□□J

OTHERS

	X751	CRYSTAL RESONATOR (14.31818MHz)	ASS1056
	CN702	21P FFC CONNECTOR	52045-2145
	CN701	26P FFC CONNECTOR	52045-2645
	702	2P PIN JACK	AKB7076
	JA701	3P PIN JACK	AKB7109
	JA703	3P PIN AJCK	AKB7116
	JA705	MULTI HOME JACK	AKN7014
	704	PCB BINDER	VEF1040

Mark	No.	Description	Part No.

Q S-VIDEO ASSY

SEMICONDUCTORS

	IC831		BU4051BCF
	IC852		BU4053BCF
	IC851		LA7213
	IC801,IC802		NJM2296M
	Q852,Q853		2SA933S
	Q851		DTC124ES
	Q833,Q834		IMH11
	Q831		IMZ1A
	D801,D802,D804,D805,D851		1SS355

CAPACITORS

	C857		CCSQCH100D50
	C854		CCSQCH151J50
	C815-C818,C861,C862		CCSQCH181J50
	C898		CCSQCH221J50
	C809,C858		CCSQCH330J50
	C801,C803,C805,C807		CEAT101M10
	C819-C822,C852,C853,C863		CEAT101M10
	C881,C882		CEAT101M10
	C866,C868		CEAT101M16
	C851		CEAT3R3M50
	C831-C836,C855,C856,C891		CKSQYB103K50
	C893,C894,C899		CKSQYB103K50
	C810-C814,C859,C860		CKSQYB104K25
	C864,C865		CKSQYB104K25
	C802,C804,C806,C808		CKSQYB473K50
	C823-C826,C867,C869		CKSQYB473K50

RESISTORS

	R864		RD1/2VM201J
	R859		RD1/4VM471J
	Other Resistors		RS1/10S□□□J

OTHERS

	CN804	21P FFC CONNECTOR	52045-2145
	CN802,CN803	4P MINI DIN SOCKET	AKP7023
	JA801	4P MINI DIN SOCKET	AKP7049
	JA881,JA882	REMOTE CONTROL JACK	RKN1004
	801	PCB BINDER	VEF1040

R H. PHONE/F. VIDEO ASSY

SEMICONDUCTORS

	Q7201,Q7202		2SC1740S

CAPACITORS

	C7201,C7202,C7215,C7216		CCSQCH271J50
	C7203,C7204		CCSQCH330J50
	C7208,C7209		CEAT101M10
	C7207		CEAT470M35
	C7210,C7212		CKSQYB103K50
	C7211		CKSQYB104K25
	C7213,C7214		CKSQYB105K10
	C7217,C7218		CKSQYB392K50

RESISTORS

	All Resistors		RS1/10S□□□J

Mark	No.	Description	Part No.
OTHERS			
	CN7201	12P FFC CONNECTOR	52045-1245
	CN7202	FRONT PIN JACK 4P	AKX7007
	JA7201	HEADPHONE JACK	RKB1014
	KN7201	EARTH METAL FITTING	VNF1084

S DISPLAY ASSY

SEMICONDUCTORS			
	IC7071		M66311FP
	IC7001		PD5507A
	IC7051		TC7W53FU
	Q7051		2SA1037K
	Q7005		2SC2412K
	Q7001,Q7002,Q7052,Q7054		DTC124EK
	Q7053		FMA1A
	D7007-D7010,D7051-D7057		1SS355
	D7002		SLR-343DC(NPQ)
	D7001,D7071-D7079		SLR-343VR(MNP)
COIL			
	L7001		LFA2R2J
SWITCHES			
	S7001-S7030		VSG1009
CAPACITORS			
	C7010 (0.047µF/5.5V)		ACH7128
	C7007		CCSQCH101J50
	C7008,C7013,C7071		CEAL101M6R3
	C7701,C7702		CEAT100M50
	C7052		CEAT101M6R3
	C7001-C7005,C7011,C7073,C7074		CKSQYB102K50
	C7091		CKSQYB102K50
	C7051		CKSQYB103K50
	C7009,C7072		CKSQYB473K50
	C7053		CKSQYB562K50
RESISTORS			
	R7044		RA15T104J
	Other Resistors		RS1/10S□□□J
OTHERS			
	X7001	CERAMIC RESONATOR (7.2MHz)	ASS7018
	7001	3P CABLE HOLDER	51052-0300
	7002,7003	8P CABLE HOLDER	51052-0800
	CN7005	5P FFC CONNECTOR	52045-0545
	CN7002	6P FFC CONNECTOR	52045-0645
	CN7003	8P FFC CONNECTOR	52045-0845
	CN7004	12P FFC CONNECTOR	52045-1245
	CN7001	32P FFC CONNECTOR	52045-3245
	V7001	FL TUBE	AAV7063
	7004	REMOTE RECEIVER UNIT	GP1U27X

T ROTARY ENCODER ASSY

SWITCH			
	S7102		ASX7031
CAPACITORS			
	C7101,C7102		CKSQYB103K50

Mark	No.	Description	Part No.
RESISTORS			
	All Resistors		RS1/10S□□□J
OTHERS			
	CN7101	6P FFC CONNECTOR	52044-0645

U VOLUME ASSY

SEMICONDUCTORS			
	Q7301,Q7302		2SA1993
	Q7303,Q7304		2SC5395
	D7301		1SR154-400
CAPACITORS			
	C7301		CEANP100M16
	C7302		CEAT220M50
	C7303		CEAT471M6R3
RESISTORS			
	VR7301 (VARIABLE WITH MOTOR)		ACX7037
	Other Resistors		RS1/10S□□□J
OTHERS			
	CN7301	8P FFC CONNECTOR	52045-0845
	KN7301	EARTH METAL FITTING	VNF1084

V PRIMARY ASSY

SEMICONDUCTORS			
⚠	IC6001		NJM78M56FA
	Q6001		DTC143ES
	D6005-D6007		1SS133
	D6008		MTZJ5.1A
⚠	D6001-D6004		S5688G
COIL			
⚠	L6001	LINE FILTER	ATF1006
TRANSFORMER			
⚠	T6001	STANDBY TRANS.	ATT7043
RELAY			
⚠	RY6001	POWER RELAY	ASR7022
CAPACITORS			
⚠	C6002,C6003 (10000pF/AC250V)		ACG7020
	C6005		CEAT102M16
	C6006		CEAT470M25
	C6004		CKCYF103Z50
RESISTORS			
	R6001 (2.2MΩ, 1/2W)		RCN1080
	R6003		RD1/2PM270J
	Other Resistors		RD1/4PU□□□J
OTHERS			
⚠	6004	3P AC OUTLET	AKP1053
	H6001,H6002	FUSE CLIP	AKR1004
	CN6003	4P SOCKET	KP200TA4L
⚠	CN6002	AC CORD SOCKET	RKP1751
	6005	PCB BINDER	VEF1040
	6002,6003	SCREW TERMINAL	VNE1948

Mark	No.	Description	Part No.

W DIGITAL-I/O ASSY

SEMICONDUCTORS

	IC1201	TC74HCU04AF

COILS AND FILTERS

	F1203,F1204 CHIP BEAD	DTF1064
	L1201,L1202 CHIP COIL	LCTA330J3225

CAPACITORS

	C1204,C1211	CCSQCH470J50
	C1206,C1213	CEAT470M10
	C1203,C1210	CKSQYB103K50
	C1207,C1212,C1215,C1216	CKSQYF104Z25
	C1236,C1237	CKSQYF104Z25

RESISTORS

	All Resistors	RS1/10S□□□J

OTHERS

	CN1201 11P FFC CONNECTOR	52045-1145
	JA1204 2P PIN JACK	AKB7121
	JA1201,JA1202 OPTICAL RECEIVE MOD.	GP1F37R1
	JA1203 OPTICAL LINK MOD.	GP1F38T2

X RF TERMINAL ASSY

CAPACITORS

	C1251	CKSQYB473K50
	C1250	CKSQYF473Z50

RESISTORS

	All Resistors	RS1/10S□□□J

OTHERS

	CN1250 3P PLUG	KM250MA3
	JA1250 1P PIN JACK (AU, BLK)	VKB1074
	1250 SCREW TERMINAL	VNE1948

Y DSP ASSY

SEMICONDUCTORS

	IC9203	CS5360-KS
	IC9101	CS8414-CS
	IC9201,IC9202	NJM2100M
	IC9041,IC9602-IC9604,IC9701-IC9704	NJM4558MD
	IC9401,IC9411,IC9421	PCM1716E
	IC9501	PD5503A
	IC9374	PDK042A
	IC9071	PM4007A
	IC9391	PQ20WZ51
	IC9091	SRM2B256SLMX70
	IC9372	TC55V1664BFT-12
	IC9371	TC55V8128BJ-12
	IC9151	TC74ACT151F
	IC9102	TC74VHC157FT
	IC9103	TC7SH08FU
	IC9311	TC7WT241FU
	IC9204,IC9361	TC7WU04FU
	IC9601	TC9164AF
	IC9705	UPC4570G2
	IC9321	XCD56362PV100
	Q9007	2PB709A
	Q9003,Q9032	2PD601A
	Q9001,Q9002,Q9004-Q9006,Q9031	2SC3082K
	Q9201,Q9202,Q9601-Q9606	2SC3326
	Q9102,Q9104,Q9203,Q9607	DTA124EK
	Q9609,Q9610	DTA124EK
	Q9101,Q9103,Q9204,Q9205,Q9608	DTC124EK
	D9601,D9602	1SS181
	D9201-D9204	1SS226
	D9002	1SS355
	D9001	KV1851

COILS AND FILTERS

	F9001 BPF	ATF7001
	L9003 INDUCTOR	ATH7001
	L9071,L9104,L9321,L9323,L9391 CHIP FERRITE BEAD	ATL7002
	L9399,L9402-L9408,L9501,L9801 CHIP FERRITE BEAD	ATL7002
	L9807,L9809 CHIP FERRITE BEAD	ATL7002
	F9072 CHIP BEAD	DTF1064
	L9091,L9092,L9101,L9102 CHIP SOLID INDUCTOR	QTL1013
	L9105-L9108,L9151,L9152 CHIP SOLID INDUCTOR	QTL1013
	L9203-L9206,L9311,L9361 CHIP SOLID INDUCTOR	QTL1013
	L9371,L9372,L9374,L9396-L9398 CHIP SOLID INDUCTOR	QTL1013

CAPACITORS

	C9329,C9349,C9355,C9357,C9358	CCSQCH101J50
	C9378,C9386	CCSQCH101J50
	C9232,C9453-C9455,C9809	CCSQCH221J50
	C9815,C9816	CCSQCH221J50
	C9112,C9512	CCSQCH271J50
	C9224,C9225	CCSQCH330J50
	C9033,C9325,C9326,C9335,C9337	CCSRCH101J50
	C9339,C9341,C9345,C9347,C9374	CCSRCH101J50
	C9387,C9609,C9610,C9721,C9722	CCSRCH101J50
	C9735	CCSRCH101J50
	C9364	CCSRCH180J50
	C9363	CCSRCH220J50
	C9095,C9231,C9233,C9621,C9622	CCSRCH221J50
	C9761-C9766	CCSRCH221J50
	C9057,C9201,C9202	CCSRCH270J50
	C9076,C9104,C9106,C9154,C9214	CCSRCH271J50
	C9220,C9362,C9402,C9412,C9422	CCSRCH271J50
	C9629	CCSRCH271J50
	C9719,C9720,C9733	CCSRCH331J50
	C9741	CCSRCH470J50
	C9451,C9452,C9509,C9617,C9618	CCSRCH471J50
	C9639	CCSRCH471J50
	C9211,C9717,C9718,C9731,C9808	CCSRCH561J25
	C9007	CCSRCH750J50
	C9707,C9708	CCSRCH820J50

VSX-29TX, VSX-27TX, VSX-26TX, VSX-24TX, VSX-D908S

Mark	No.	Description	Part No.
	C9611,C9612		CCSRCH821J25
	C9312,C9643,C9644,C9756		CEJA100M25
	C9071,C9393,C9501,C9740,C9801		CEJA101M10
	C9442		CEJA221M10
	C9343,C9360		CEJA221M6R3
	C9216,C9219,C9222,C9403,C9405		CEJA330M10
	C9408,C9413,C9415,C9418,C9423		CEJA330M10
	C9425,C9428,C9713,C9714		CEJA330M10
	C9727,C9728,C9739,C9751-C9755		CEJA330M10
	C9091,C9102,C9108,C9114,C9151		CEJA470M16
	C9372,C9376,C9383		CEJA470M16
	C9016,C9803,C9805		CEJA470M25
	C9406,C9409,C9416,C9419,C9426		CEJA470M6R3
	C9429		CEJA470M6R3
	C9203,C9204,C9206,C9207,C9391		CEJA4R7M50
	C9603,C9604,C9615,C9616		CEJA4R7M50
	C9627,C9628		CEJA4R7M50
	C9053		CEJANP4R7M25
	C9110		CEJAR47M50
	C9113,C9322,C9323,C9332,C9334		CKSQYB103K50
	C9342,C9344,C9350-C9354,C9377		CKSQYB103K50
	C9385,C9636		CKSQYB103K50
	C9330		CKSQYB474K16
	C9073,C9080,C9205,C9208,C9511		CKSQYF104Z25
	C9212,C9554		CKSRYB102K50
	C9014,C9054,C9056,C9070,C9103		CKSRYB103K50
	C9105,C9107,C9119,C9153,C9158		CKSRYB103K50
	C9221,C9313,C9324,C9327,C9333		CKSRYB103K50
	C9336,C9338,C9340,C9346,C9348		CKSRYB103K50
	C9361,C9373,C9388,C9401,C9411		CKSRYB103K50
	C9421,C9637		CKSRYB103K50
	C9626,C9730		CKSRYB104K16
	C9605,C9606,C9633		CKSRYB122K50
	C9703,C9704,C9715,C9716,C9729		CKSRYB182K50
	C9601,C9602,C9613,C9614,C9625		CKSRYB222K50
	C9701,C9702		CKSRYB272K50
	C9732		CKSRYB333K16
	C9645		CKSRYB472K50
	C9215,C9218,C9404,C9407,C9410		CKSRYB473K16
	C9414,C9417,C9420,C9424,C9427		CKSRYB473K16
	C9430		CKSRYB473K16
	C9359		CKSRYB562K50
	C9111		CKSRYB682K50
	C9118		CKSRYB683K16
	C9736		CKSRYB821K50
	C9002-C9006,C9008-C9013,C9015		CKSRYF104Z16
	C9017,C9018,C9031,C9032,C9043		CKSRYF104Z16
	C9051,C9052,C9055,C9058		CKSRYF104Z16
	C9074,C9075,C9077-C9079,C9081		CKSRYF104Z16
	C9092,C9209,C9210,C9607,C9608		CKSRYF104Z16
	C9619,C9620,C9631,C9632		CKSRYF104Z16
	C9709-C9712,C9723-C9726		CKSRYF104Z16
	C9737,C9738		CKSRYF104Z16
	C9041,C9042		CKSRYF105Z10

RESISTORS

R9158,R9351,R9376-R9379,R9394		RS1/10S0R0J
R9401,R9411,R9421,R9452-R9454		RS1/10S0R0J
R9104		RS1/10S101J
R9114,R9239,R9504,R9505		RS1/10S102J
R9214		RS1/10S103J
R9393		RS1/10S2001F
R9074,R9128		RS1/10S221J
R9120		RS1/10S331J
R9061		RS1/10S471J
R9360		RS1/10S472J
R9391		RS1/10S5100F
Other Resistors		RS1/16S□□□J

OTHERS

X9501	CERAMIC RESONATOR (7.70MHz)	ASS1055
X9001	CRYSTAL RESONATOR (18.432MHz)	ASS7009
X9361	CRYSTAL RESONATOR (20MHz)	ASS7023
X9201	CRYSTAL RESONATOR (12.288MHz)	DSS1030
CN9551	7P FFC CONNECTOR	52045-0745
CN9803	11P FFC CONNECTOR	52045-1145
	PC BOARD DSP	ANP7311
CN9804	3P PLUG	KM250MA3
CN9801	17P SOCKET	KP200TA17L
CN9802	9P SOCKET	KP200TA9L

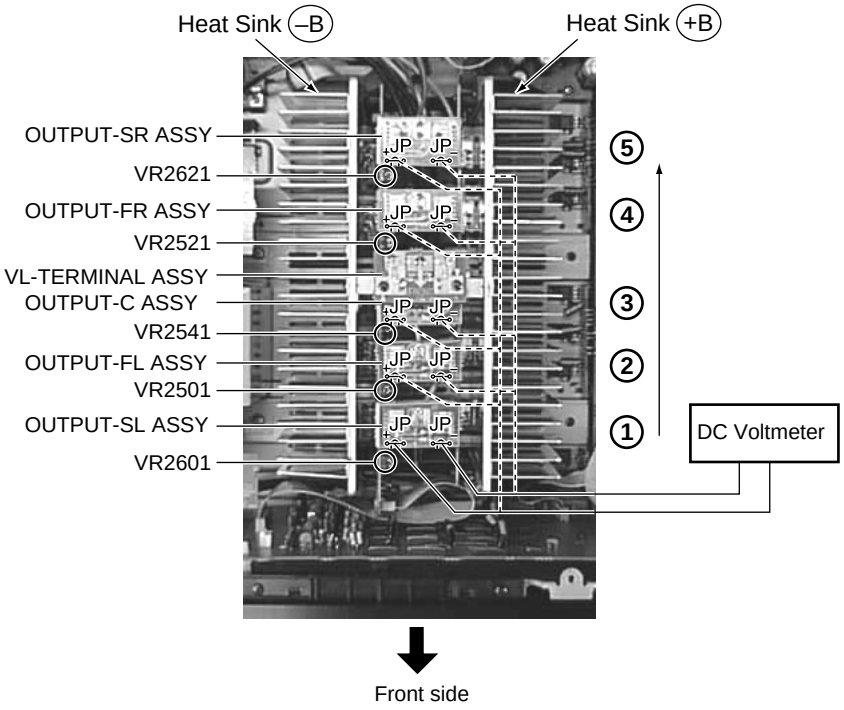
6. ADJUSTMENT

6.1 IDLE CURRENT ADJUSTMENT

• **CAUTION** : Heatsink's DC level is equal to +B or -B.
Don't touch them or you will be electricary shocked.

1. Decrease the level of the Adjustment Variable resistors (VR) for the channel to be adjusted. (Turn counterclockwise.)
2. Set the power switch to ON.
3. Connect the DC voltmeter as shown below and adjust VRs in step No. order so that voltages become 16mV $^{+4mV}_{-0mV}$.
4. Ages for seven minutes.
5. Readjust in step No. order so that the voltages become 11.5mV ± 1mV (10.5 to 12.5mV). Adjustment is completed.

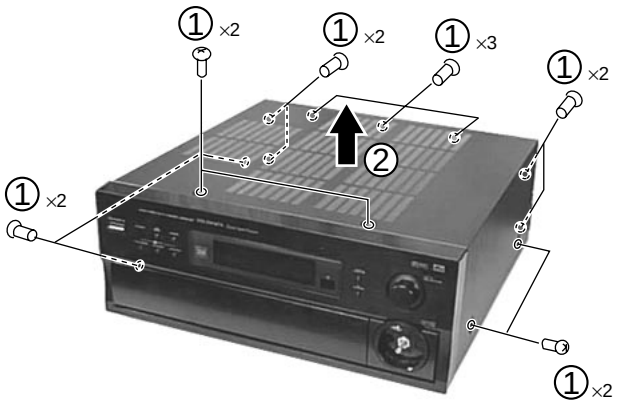
Step No.	Adjustment VR	Adjustment ch
1	VR2601	SL ch
2	VR2501	FL ch
3	VR2541	C ch
4	VR2521	FR ch
5	VR2621	SR ch

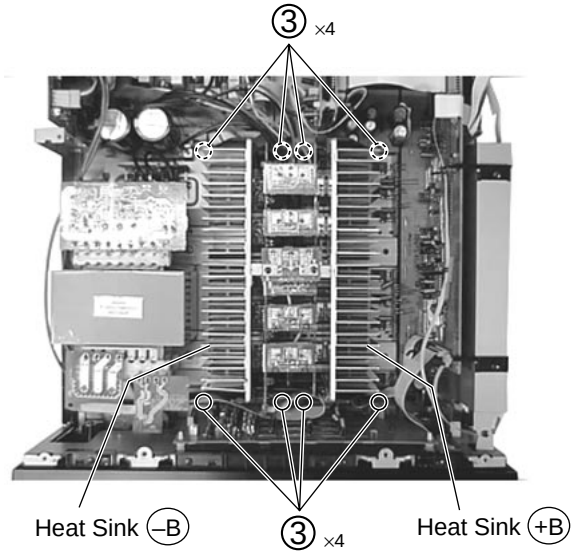


7. GENERAL INFORMATION

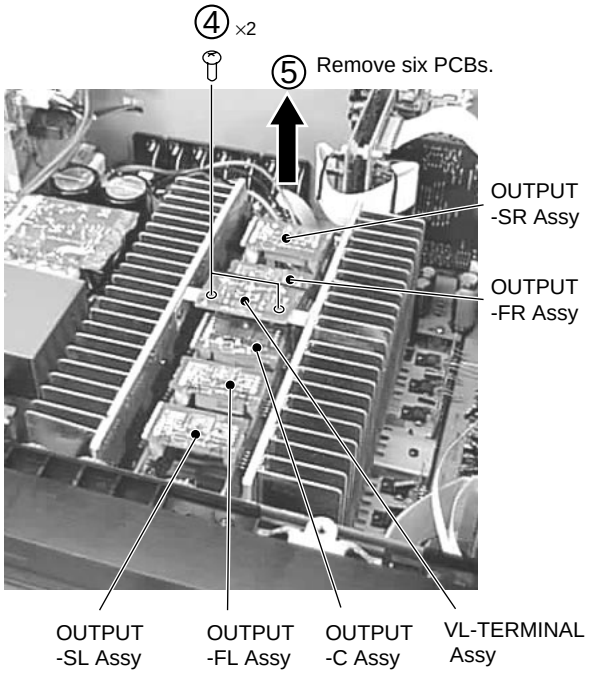
7.1 DISASSEMBLY

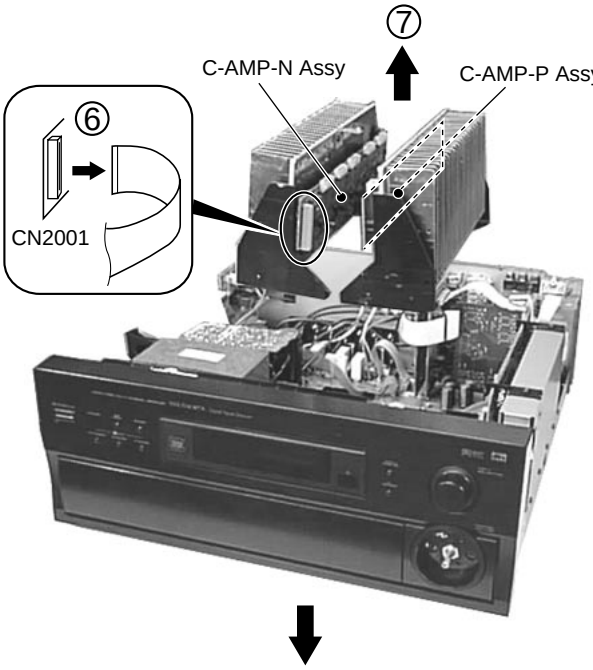
■ C-AMP-N and C-AMP-P ASSYS





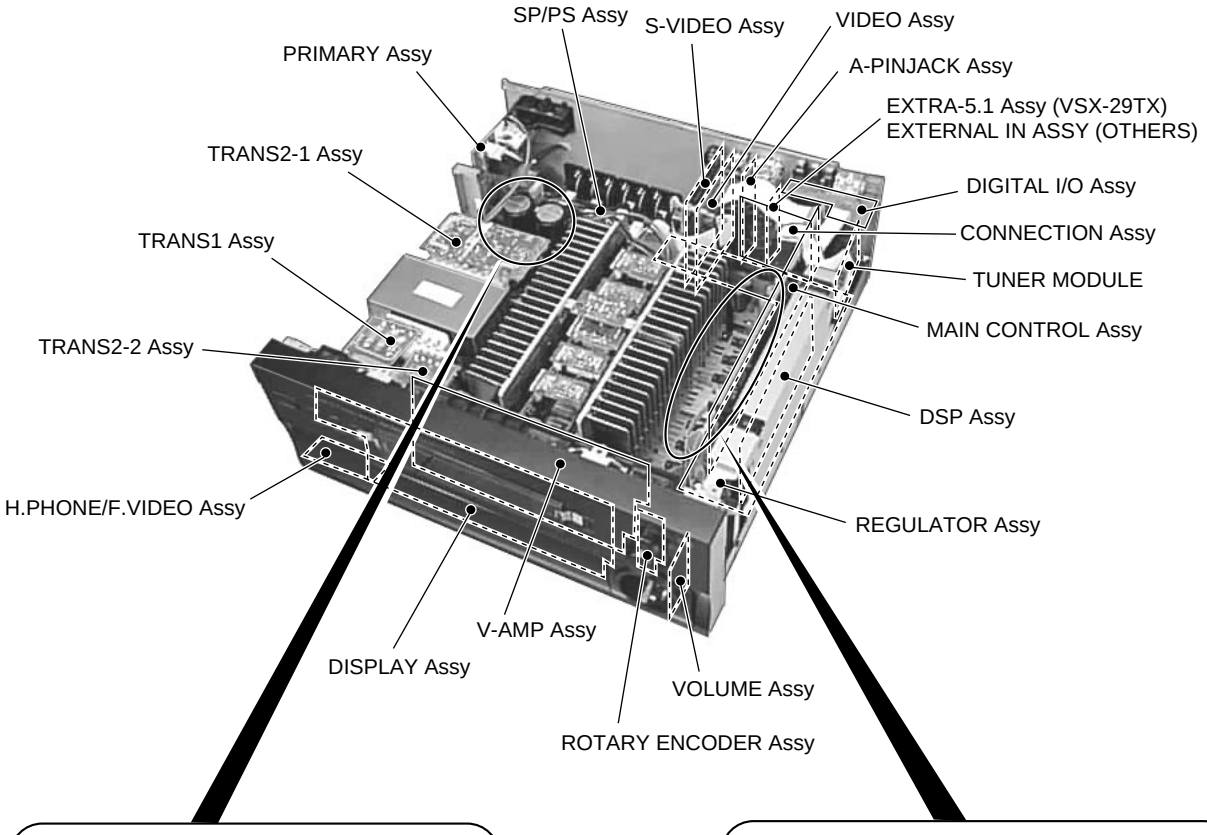
• **CAUTION** : Heatsink's DC level is equal to +B or - B. Don't touch them or you will be electricary shocked.

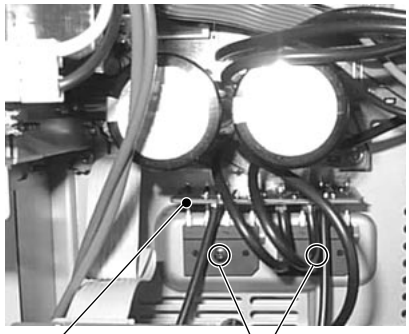




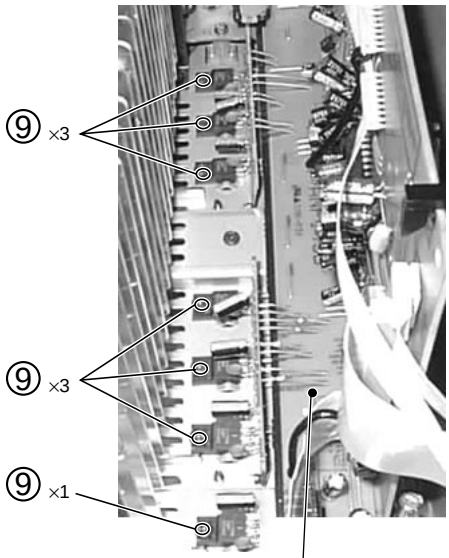
Replace the FETs on the C-AMP-N and C-AMP-P assemblies.

■ DIODE, REGULATOR and Other ASSYS





Replace the diode.



Replace the Regulator IC.

7.2 PARTS

7.2.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

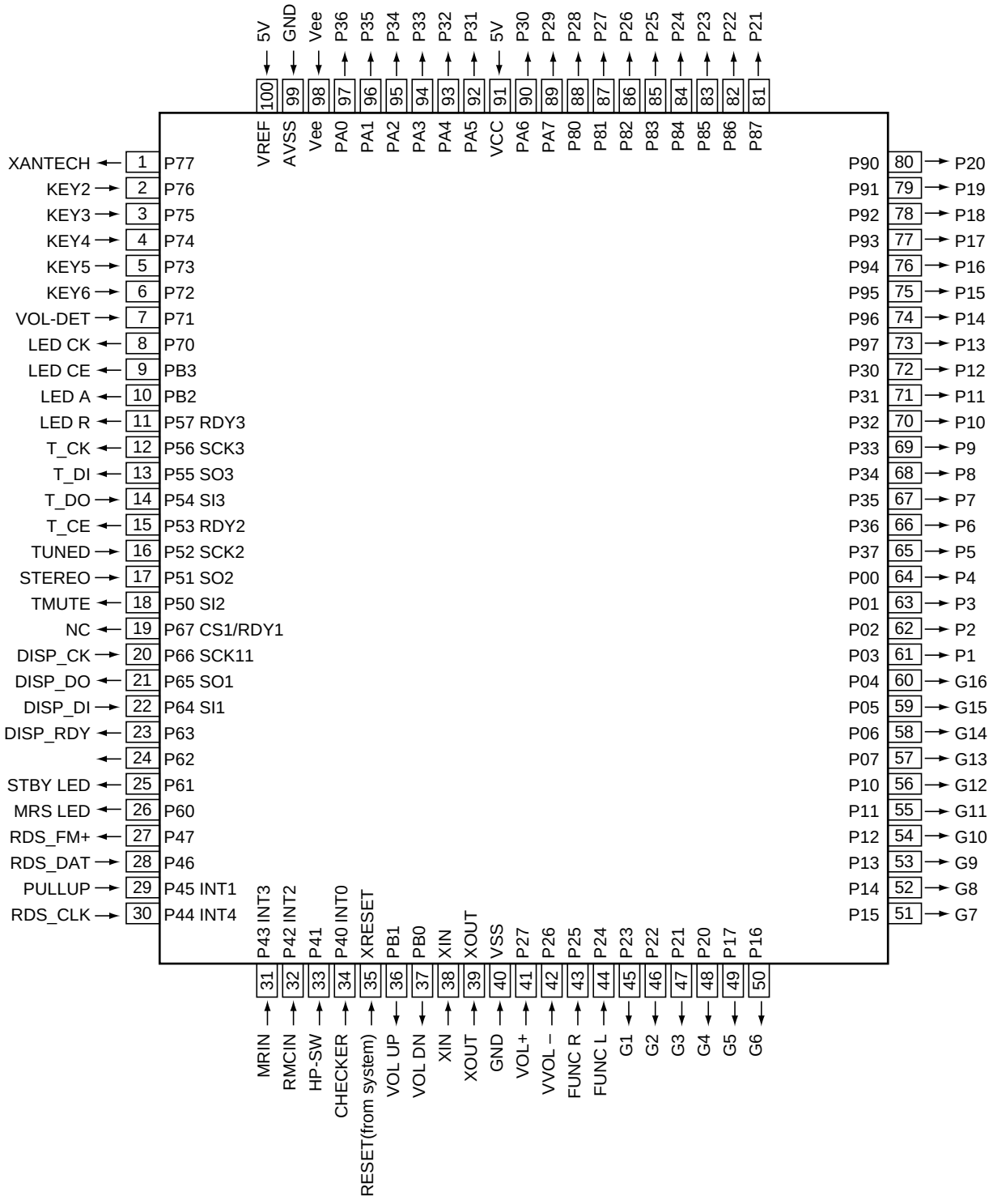
●List of IC

PD5507A, PD5506A

■ PD5507A (DISPLAY ASSY : IC7001)

• Display Control IC

● Pin Assignment (Top View)



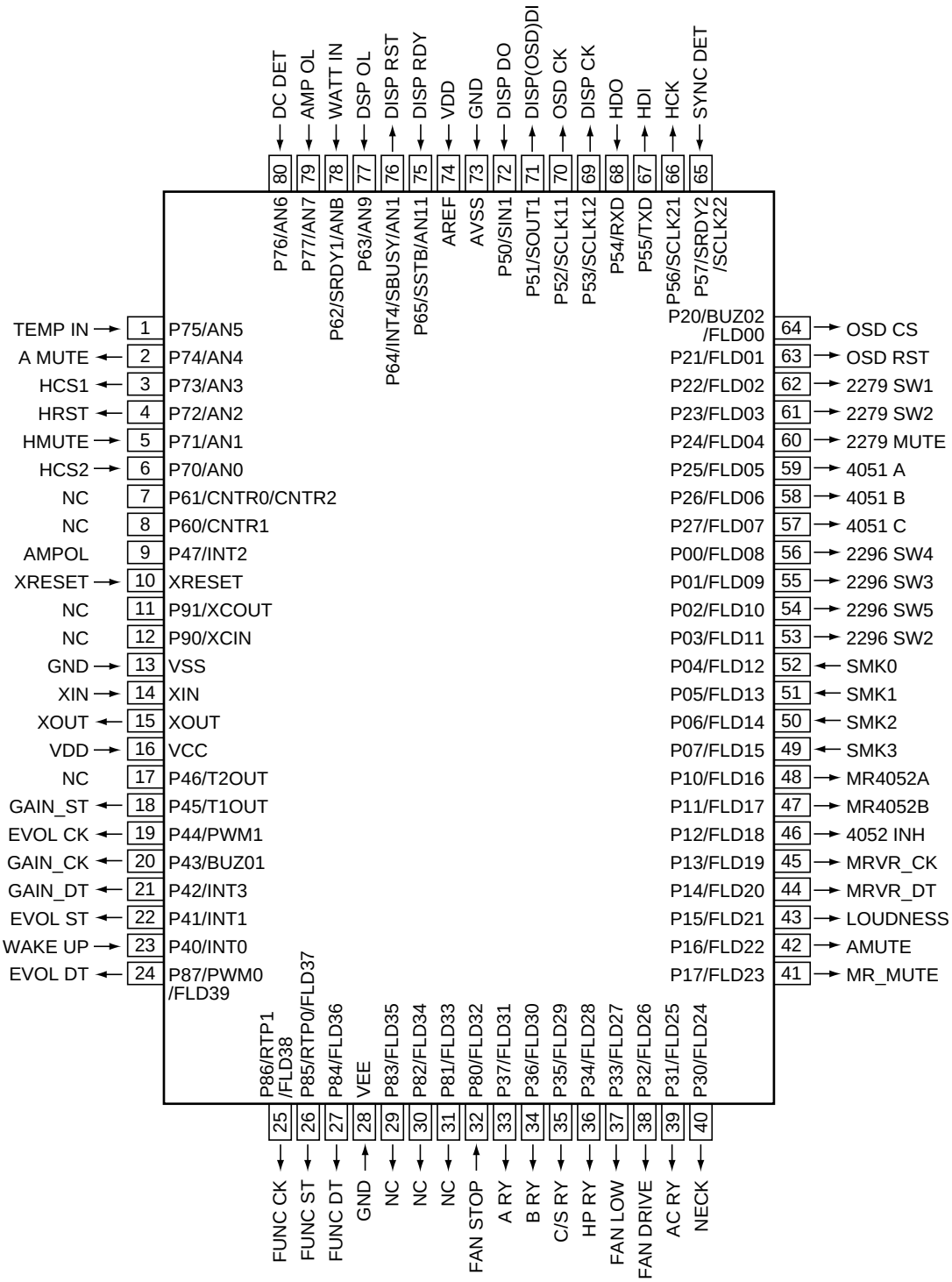
● Pin Function

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	XANTECH	O	XANTECH ON/OFF	51	G7	O	Grid output 7
2	KEY 2	I	Key scan input 2	52	G8	O	Grid output 8
3	KEY 3	I	Key scan input 3	53	G9	O	Grid output 9
4	KEY 4	I	Key scan input 4	54	G10	O	Grid output 10
5	KEY 5	I	Key scan input 5	55	G11	O	Grid output 11
6	KEY 6	I	Key scan input 6	56	G12	O	Grid output 12
7	VOL-DET	I	Detection of volume position	57	G13	O	Grid output 13
8	LED CKL	O	Clock for IC7071 M66311	58	G14	O	Grid output 14
9	LED OE	O	Output enable for IC7071 M66311	59	G15	O	Grid output 15
10	LED A	O	Data for IC7071 M66311	60	G16	O	Grid output 16
11	LED R	O	Reset for IC7071 M66311	61	S1	O	Segment output 1
12	T-CK	O	Clock for tuner module	62	S2	O	Segment output 2
13	T-DI	O	Data for tuner module	63	S3	O	Segment output 3
14	T-DO	I	Data from tuner module	64	S4	O	Segment output 4
15	T-CE	O	Chip enable for tuner module	65	S5	O	Segment output 5
16	TUNED	I	Tuned data from tuner module	66	S6	O	Segment output 6
17	STEREO	I	Stereo tuned data from tuner module	67	S7	O	Segment output 7
18	T-MUTE	O	Tuner mute ON/OFF	68	S8	O	Segment output 8
19	NC	O	Open	69	S9	O	Segment output 9
20	DISP CK	I	Clock from IC901 MAIN U-COM	70	S10	O	Segment output 10
21	DISP DO	O	Data for IC901 MAIN U-COM	71	S11	O	Segment output 11
22	DISP DI	I	Data from IC901 MAIN U-COM	72	S12	O	Segment output 12
23	DISP RDY	O	Data request for IC901 MAIN U-COM	73	S13	O	Segment output 13
24	NC	–	Open	74	S14	O	Segment output 14
25	STBY LED	O	Standby LED	75	S15	O	Segment output 15
26	MRS LED	O	Sub room LED (MR&S model), EON LED (RDS model)	76	S16	O	Segment output 16
27	RDS FM+	–	VDD for IC7401 BU1923 (RDS model only)	77	S17	O	Segment output 17
28	RDS DAT	O	Data for IC7401 BU1923 (RDS model only)	78	S18	O	Segment output 18
29	NC	I	(pull-up)	79	S19	O	Segment output 19
30	RDS CLK	I	Clock for IC7401 BU1923 (RDS model only)	80	S20	O	Segment output 20
31	MR IN	I	Sub room remote control (MR&S, MR model only)	81	S21	O	Segment output 21
32	RMC IN	I	Remote control	82	S22	O	Segment output 22
33	HP-SW	I	Headphone connect detect	83	S23	O	Segment output 23
34	NC	I	For unit check test mode detection	84	S24	O	Segment output 24
35	RESET	I	Reset	85	S25	O	Segment output 25
36	VOL/UP	O	Control for VOIL UP	86	S26	O	Segment output 26
37	VOL/DN	O	Control for VOL DOWN	87	S27	O	Segment output 27
38	XIN	–	Connect a 7.2MHz oscillator	88	S28	O	Segment output 28
39	XOUT	–		89	S29	O	Segment output 29
40	VSS	–	GND	90	S30	O	Segment output 30
41	VOL+	I	Rotary encoder signal +	91	VCC	–	Power supply +5V
42	VOL-	I	Rotary encoder signal -	92	S31	O	Segment output 31
43	FUNC/R	I	Rotary encoder signal R	93	S32	O	Segment output 32
44	FUNC/L	I	Rotary encoder signal L	94	S33	O	Segment output 33
45	G1	O	Grid output 1	95	S34	O	Segment output 34
46	G2	O	Grid output 2	96	S35	O	Segment output 35
47	G3	O	Grid output 3	97	S36	O	Segment output 36
48	G4	O	Grid output 4	98	VEE	–	Power supply 5V
49	G5	O	Grid output 5	99	AVSS	–	GND
50	G6	O	Grid output 6	100	VREF	–	Reference voltage 5V

PD5506A (MAIN CONTROL ASSY : IC901)

- **Main Control IC**

- **Pin Assignment (Top View)**



● Pin Function

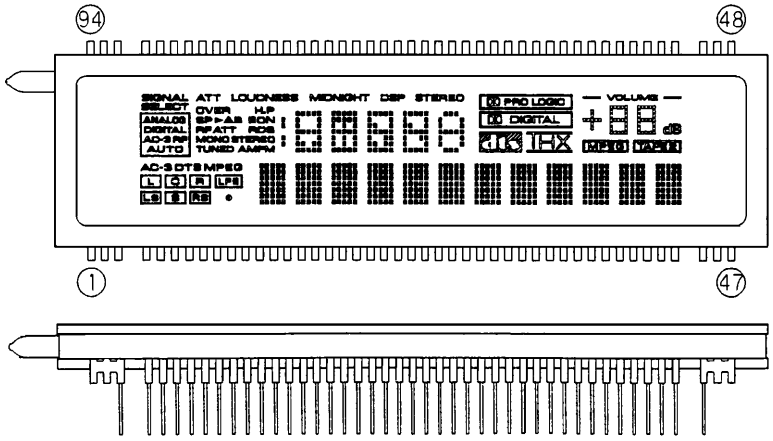
No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	TEMP IN	I/O	O/open (KU,J,SD), I/Fan temperature A/D input (other)	41	MR MUTE	O	Audio mute ON/OFF for sub room (MR&S, MR model only)
2	A MUTE	O	Audio mute ON/OFF	42	A MUTE2	O	Audio preout mute ON/OFF
3	DSP CS1	O	Chip select for IC9501 DSP U-COM	43	LOUD	O	Loudness ON/OFF
4	DSP RST	O	Reset for IC9501 DSP U-COM	44	MR-V DT	O	Data for IC110 M62429FP control (MR&S model only)
5	DSP MUTE	I	Mute request from IC9501 DSP U-COM	45	MR-V CK	O	Clock for IC110 M62429FP control (MR&S model only)
6	DSP CS2	I	Chip select from IC9501 DSP U-COM	46	4052 INH	O	Inhibit for IC102 BU4052BCF control (MR&S model only)
7	NC	O	Open	47	4052 B	O	Control for IC102 BU4052BCF (MR&S model only)
8	NC	O	Open	48	4052 A		
9	AMPOL	I	Amp Overload detect	49	SIMUKE 3	I	SIMUKE (pull-up or down)
10	RESET	I	Reset	50	SIMUKE 2		
11	NC	O	Open	51	SIMUKE 1		
12	NC	O	Open	52	SIMUKE 0		
13	GND	–	GND	53	2296-2	O	Control for IC701, 801, 802 NJM2296M
14	XIN	I	Connect a 4.19MHz oscillator	54	2296-5		
15	XOUT	O		55	2296-3		
16	VDD	–	Power supply +5V	56	2296-4		
17	NC	O	Open	57	4051-C	O	Control for IC831 BU4051BCF
18	ST3	O	Strobe for IC107 TC9163F control	58	4051-B		
19	CK2	O	Clock for IC108 TC9482N control	59	4051-A		
20	CK3	O	Clock for IC107 TC9163F control	60	2279-M	O	Control for IC731 NJM2279M (MR&S model only)
21	DT3	O	Data for IC107 TC9163F control	61	2279-2		
22	ST2	O	Strobe for IC108 TC9482N control	62	2279-1		
23	W.UP	I	AC pulse input	63	OSD RST	O	Reset for IC752 LC74782M-9011
24	DT2	O	Data for IC108 TC9482N control	64	OSD CS	O	Chip select for IC752 LC74782M-9011
25	CK1	O	Clock for IC101 TC9274N and IC104 TC9163F control	65	SYNC DET	I	Detection of synchronizing signal
26	ST1	O	Strobe for IC101 TC9274N and IC104 TC9163F control	66	DSP HCK	O	Clock for IC9501 DSP U-COM
27	DT1	O	Data for IC101 TC9274N and IC104 TC9163F control	67	DSP HDI	O	Data for IC9501 DSP U-COM
28	GND	–	GND	68	DSP HDO	I	Data from IC9501 DSP U-COM
29	NC	O	Open	69	DISP CK	O	Clock for IC7001 DISP U-COM
30	NC	O	Open	70	OSD CK	O	Clock for IC752 LC74782M-9011
31	NC	O	Open	71	DISP DI	O	Data for IC7001 DISP U-COM
32	FAN STOP	I/O	O/Open (KU,J,SD), I/Fan stop detecter (other)	72	DISP DO	I	Data from IC7001 DISP U-COM
33	A RY	O	SP A relay ON/OFF	73	GND	–	GND
34	B RY	O	SP B relay ON/OFF	74	VDD	–	Power supply +5V
35	C/S RY	O	SP C/S relay ON/OFF	75	DISP RDY	I	Data request from IC7001 DISP U-COM
36	HP RY	O	Headphone relay ON/OFF	76	DISP RST	O	Reset for IC7001 DISP U-COM
37	FAN LOW	O	Open (KU,J,SD), Fan low (other)	77	DSP OL	I	DSP overload detect, A/D input
38	FAN DRIVE	O	Open (KU,J,SD), Fan drive (other)	78	WATT IN	I/O	O/Open (KU,J,SD), I/Fan wattage input, A/D input (other)
39	AC RY	O	AC relay ON/OFF	79	AMP OL	I	Amp overload detect, A/D input
40	NECK	O	Neck ON/OFF (24,26,908,938 only)	80	DC DET	I	Detection of amp power error, A/D input

7.2.2 DISPLAY

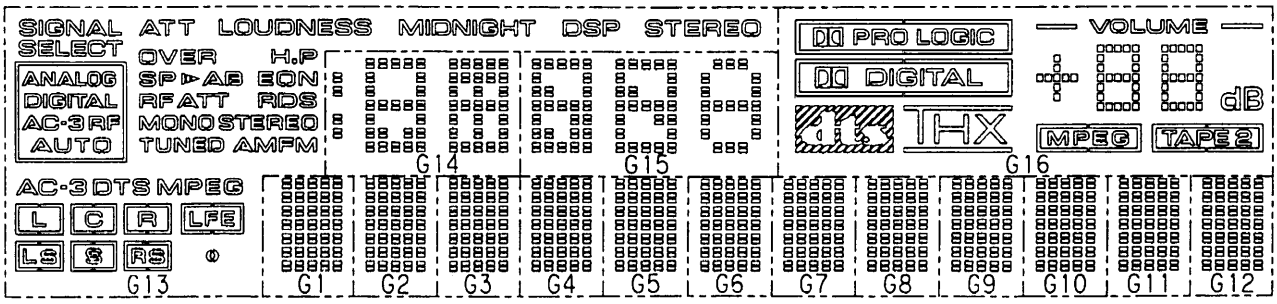
■ AAV7063 (DISPLAY ASSY :V7001)

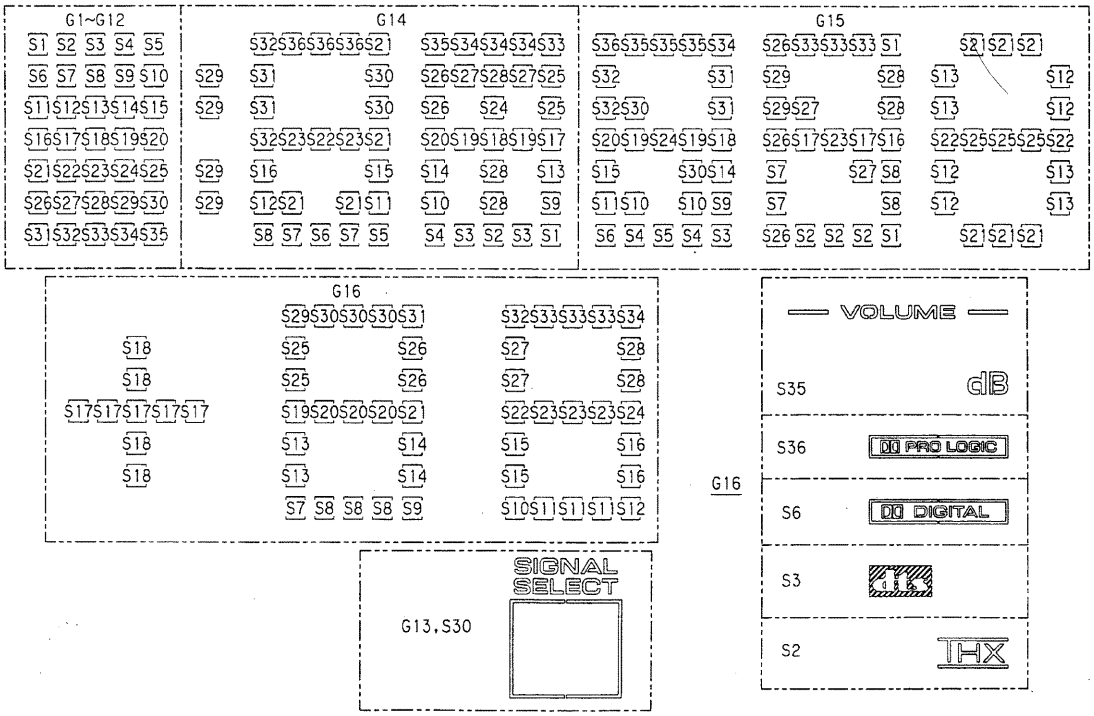
- **FL Indicator Tube**

● **Pin Assignment**



● **Grid Assignment**





● Anode and Grid Connection

	G1~G12	G13	G14	G15	G16
S1	S1		S1	S1	
S2	S2	FM	S2	S2	S2
S3	S3	AM	S3	S3	S3
S4	S4	MPEG	S4	S4	TAPE2
S5	S5	LFE	S5	S5	MPEG
S6	S6	STEREO	S6	S6	S6
S7	S7	TUNED	S7	S7	S7
S8	S8	MONO	S8	S8	S8
S9	S9	R	S9	S9	S9
S10	S10	C	S10	S10	S10
S11	S11	L	S11	S11	S11
S12	S12	RDS	S12	S12	S12

	G1~G12	G13	G14	G15	G16
S13	S13	DTS	S13	S13	S13
S14	S14	AC-3 (DTS)	S14	S14	S14
S15	S15	RFATT	S15	S15	S15
S16	S16	EON	S16	S16	S16
S17	S17	(▶A)B	S17	S17	S17
S18	S18	(▶)A(B)	S18	S18	S18
S19	S19	⏻	S19	S19	S19
S20	S20	Ls	S20	S20	S20
S21	S21	S	S21	S21	S21
S22	S22	Rs	S22	S22	S22
S23	S23	SP▷▶	S23	S23	S23
S24	S24	OVER	S24	S24	S24

	G1~G12	G13	G14	G15	G16
S25	S25	H.P	S25	S25	S25
S26	S26	AUTO	S26	S26	S26
S27	S27	AC-3RF	S27	S27	S27
S28	S28	DIGITAL	S28	S28	S28
S29	S29	ANALOG	S29	S29	S29
S30	S30	S30	S30	S30	S30
S31	S31	ATT	S31	S31	S31
S32	S32	LOUDNESS	S32	S32	S32
S33	S33	MIDNIGHT	S33	S33	S33
S34	S34	DSP	S34	S34	S34
S35	S35	(DSP) STEREO	S35	S35	S35
S36			S36	S36	S36

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Assignment	NL	NL	F1	NP	D	IC	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL

Pin No.	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
Assignment	NL	NL	S36	S35	S34	S33	S32	S31	S30	S29	NL	NL	NL	S28	S27	S26	S25	S24	H	NP	F2	NL	NL

Pin No.	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
Assignment	NL	NL	NL	NP	S23	S22	S21	S20	S19	S18	S17	S16	S15	S14	S13	S12	S11	S10	S9	S8	S7	S6	S5	S4

Pin No.	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94
Assignment	S3	S2	S1	G16	G15	G14	G13	G12	G11	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1	NP	NL	NL	NL

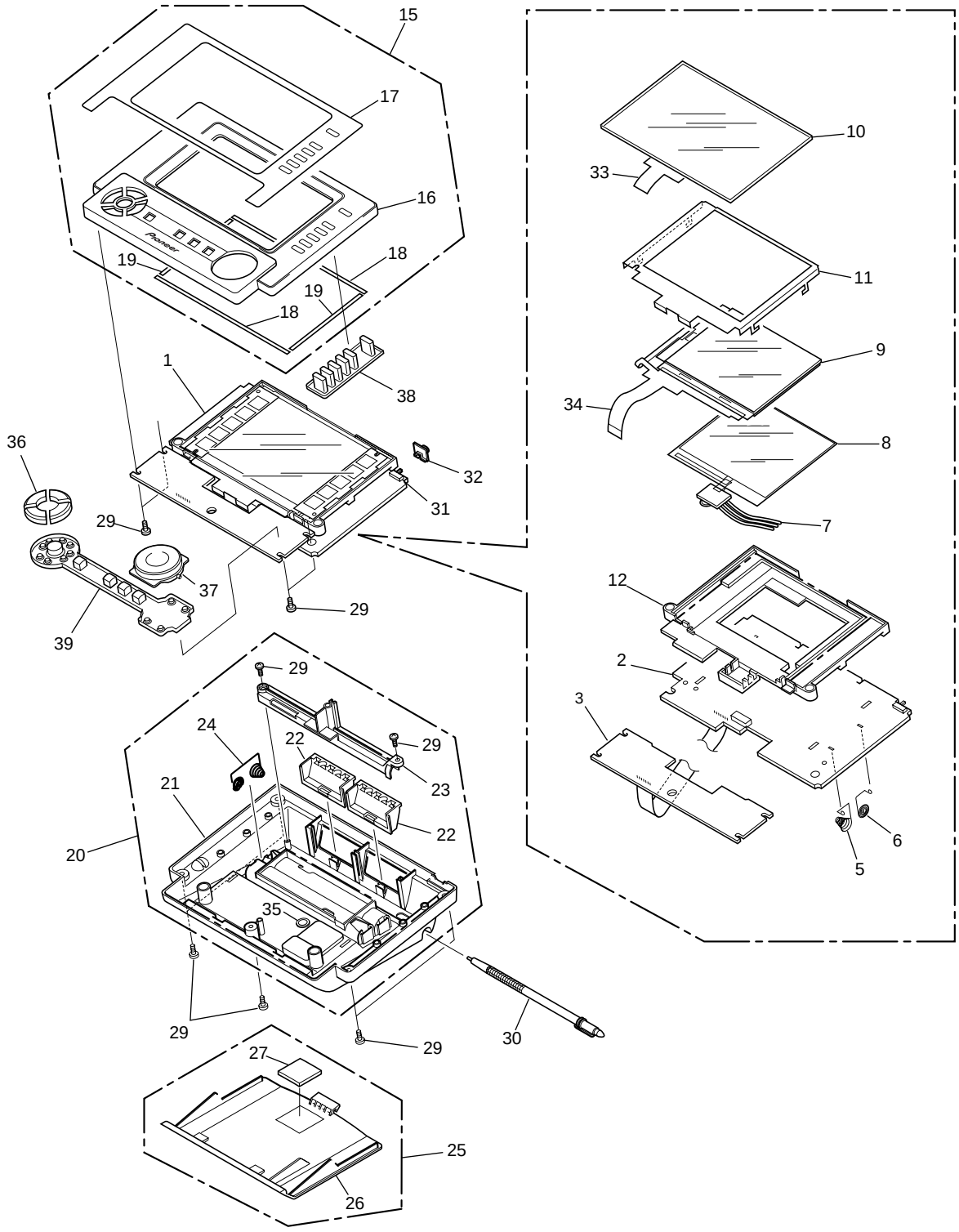
F1, F2 : Filament G1 to G16 : Grid S1 to S36 : Anode D : External connect to F1 NP: No Pin NL : Lead
H : Power supply grid usually (ec level = Apply Typ 35.0 VDC) IC : Internal connection

7.3 REMOTE CONTROL UNIT

7.3.1 AXD7216 (CU-VSX158)

7.3.1.1 EXPLODED VIEWS AND PARTS LIST

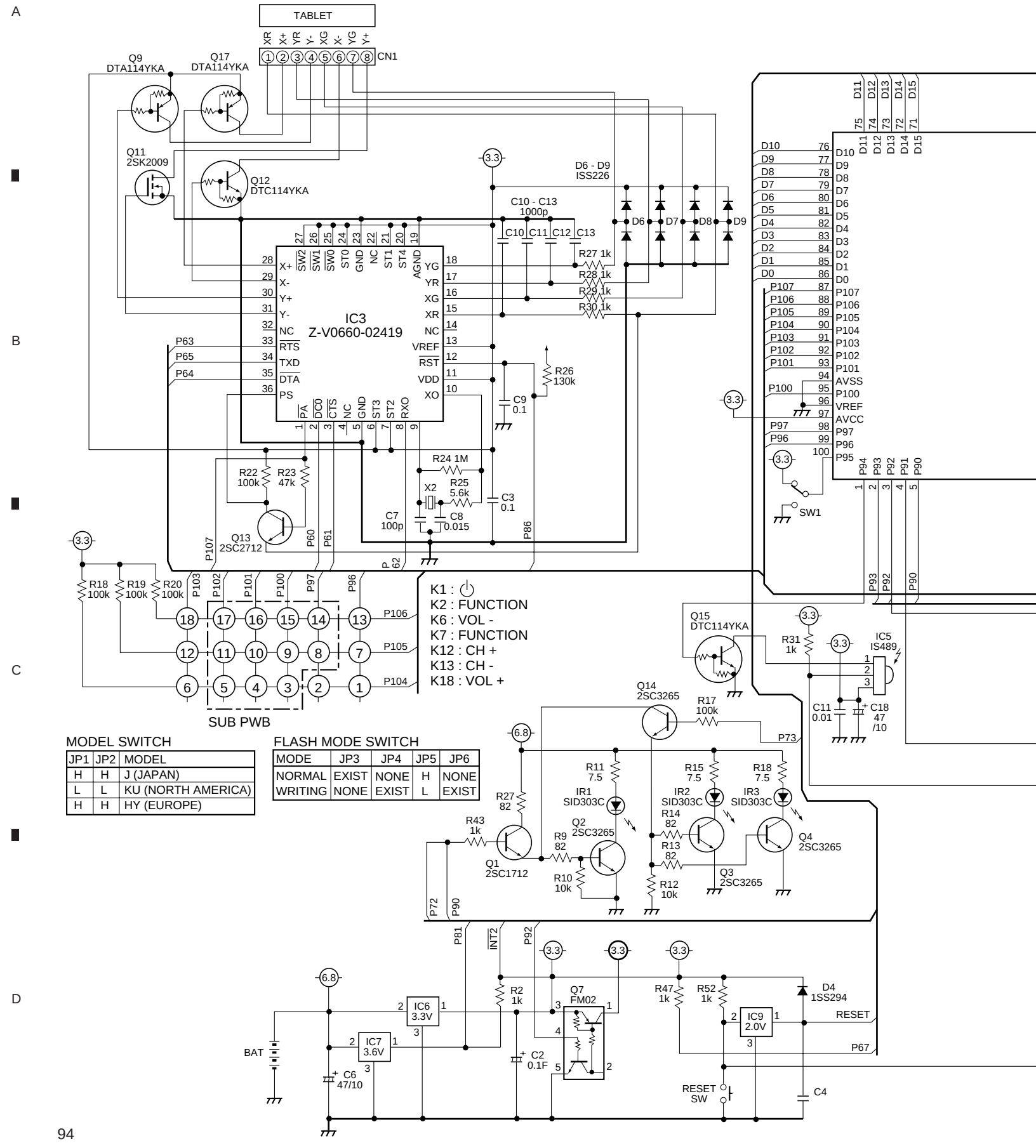
NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*



● PARTS LIST

Mark	No.	Description	Part No.
	1	PWB Assy	RRC4–7251–01
	2	PCB Assy	AZC7296
	3	• • • • •	
	4	• • • • •	
	5	Terminal A	411RRC15801R
	6	Terminal B	411RRC15901R
	7	Jumper Cable	E–AA1446–001
	8	EL Module	AZC7294
	9	LCD Module	AZC7295
	10	Touch Panel	NTX01005701R
	11	Frame	501RRC01901R
	12	LCD Holder	AZN7787
	13	• • • • •	
	14	• • • • •	
	15	Upper Case Assy	RRC4–7251–02
	16	Case A	AZN7783
	17	Name Plate	AZA7344
	18	Cushion A	701RRC04801R
	19	Cushion B	701RRC04901R
	20	Bottom Case Assy	RRC4–7251–03
	21	Case B	AZN7784
	22	Filter	AZA7343
	23	Pen Holder	AZN7786
	24	Terminal	413RRC11201R
	25	Battery Cover Assy	RRC4–7251–04
	26	Battery Cover	AZN7785
	27	Cushion C	701RRC03501R
	28	• • • • •	
	29	Screw	AZB7144
	30	Touch Pen	E–AA1445–001
	31	Slide Switch	JSB1220–0111
	32	Slide Knob	AZA7347
	33	FPC Connector	CFP5519–0101
	34	FPC Connector	E-CP0535–008
	35	MT Switch	JPM1030–0801
	36	Key Top A	AZA7345
	37	Key Top B	AZA7346
	38	Rubber Sheet A	AZA7348
	39	Rubber Sheet B	AZA7349

7.3.1.2 SCHEMATIC DIAGRAM

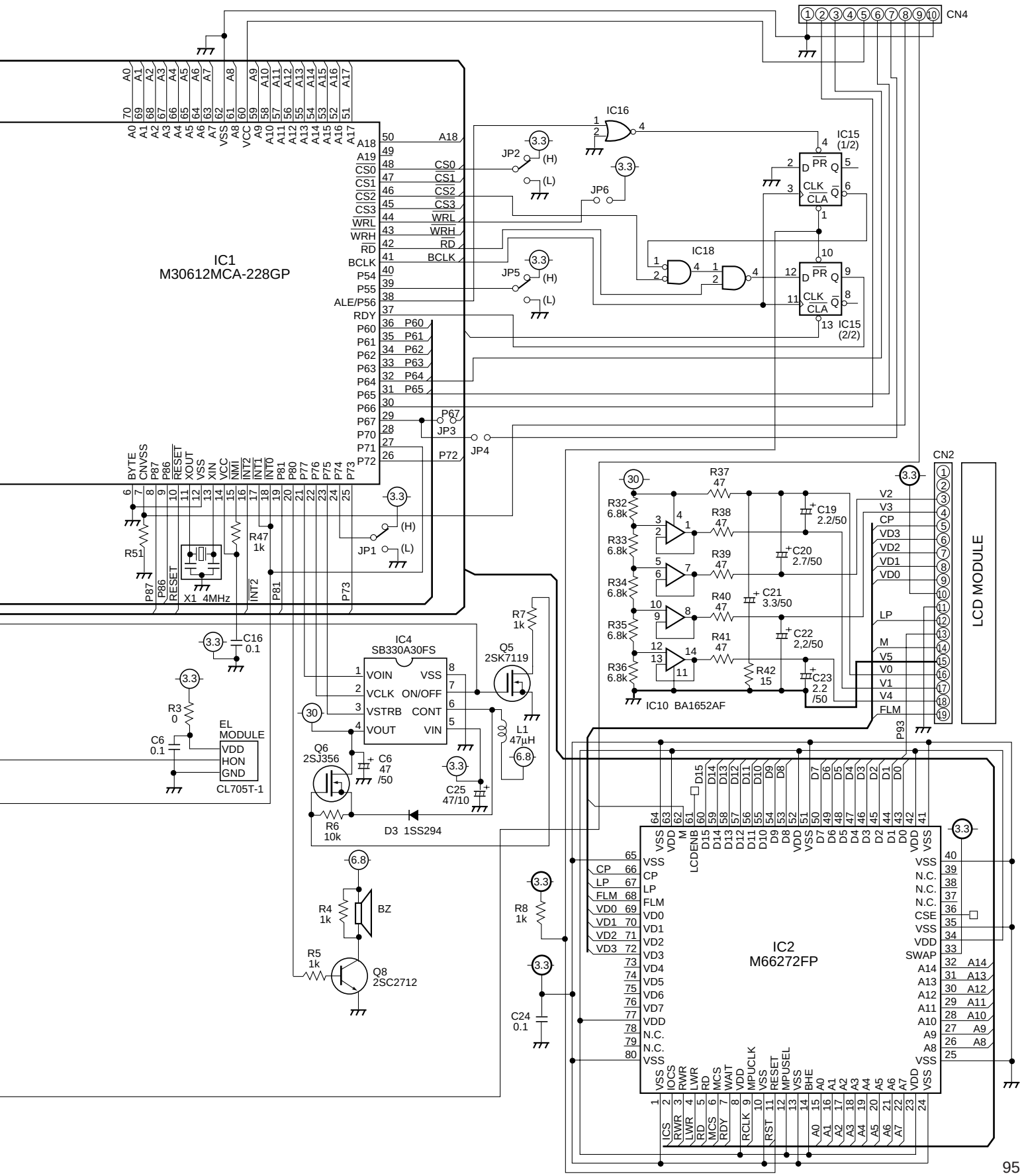


MODEL SWITCH

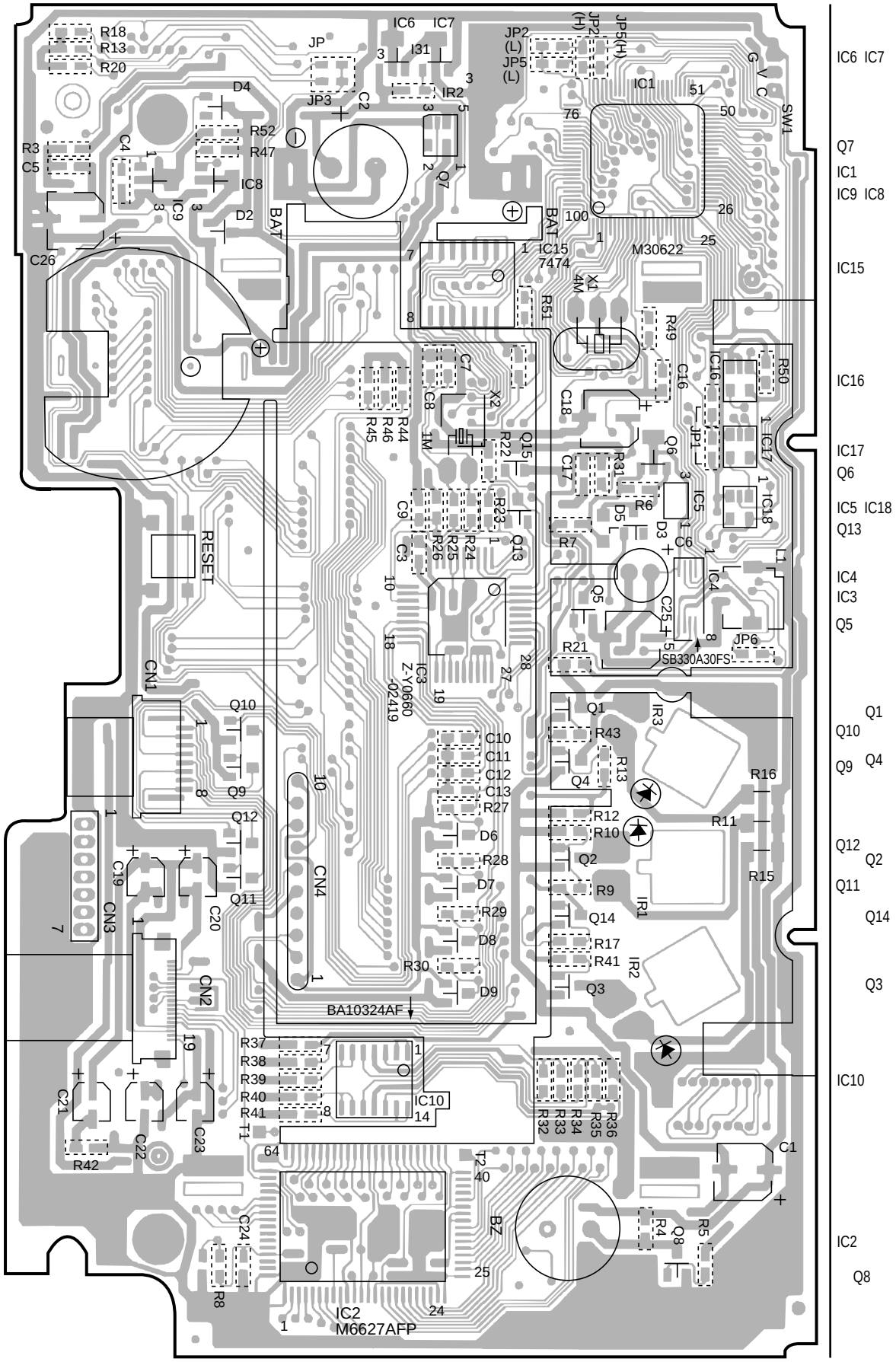
JP1	JP2	MODEL
H	H	J (JAPAN)
L	L	KU (NORTH AMERICA)
H	H	HY (EUROPE)

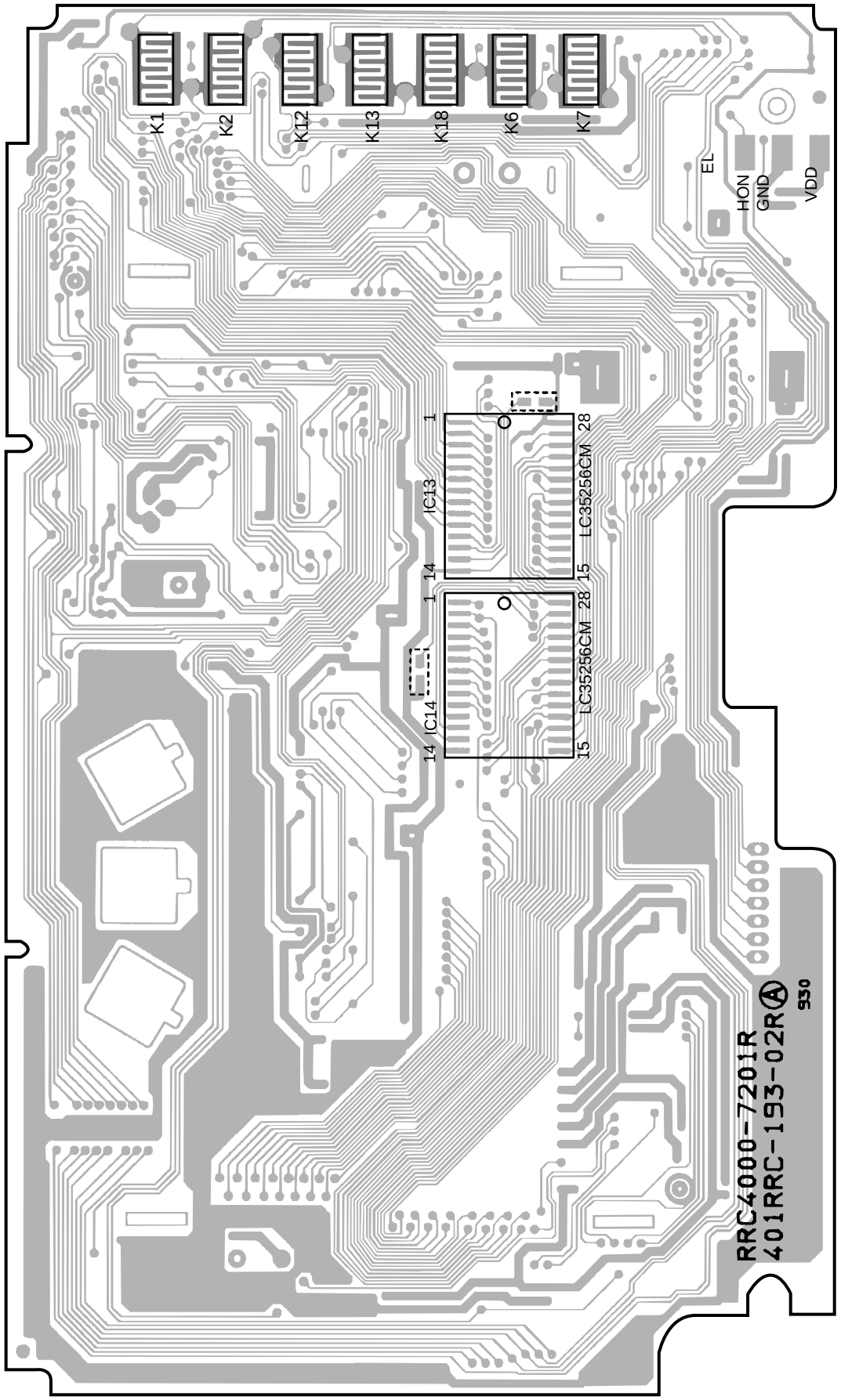
FLASH MODE SWITCH

MODE	JP3	JP4	JP5	JP6
NORMAL	EXIST	NONE	H	NONE
WRITING	NONE	EXIST	L	EXIST


CN4
IC1
M30612MCA-228GP
IC16
IC15 (1/2)
IC15 (2/2)
IC18
JP2
JP5
JP6
JP3
JP4
JP1
X1 4MHz
IC4
SB330A30FS
Q5
2SK7119
Q6
2SJ356
D3 1SS294
L1
47µH
C25
47/10
C24
0.1
R6
10k
R7
1k
R8
1k
R4
1k
R5
1k
BZ
Q8
2SC2712
EL
MODULE
CL705T-1
CN2
LCD MODULE
IC10 BA1652AF
IC2
M66272FP

7.3.1.3 PCB DIAGRAM



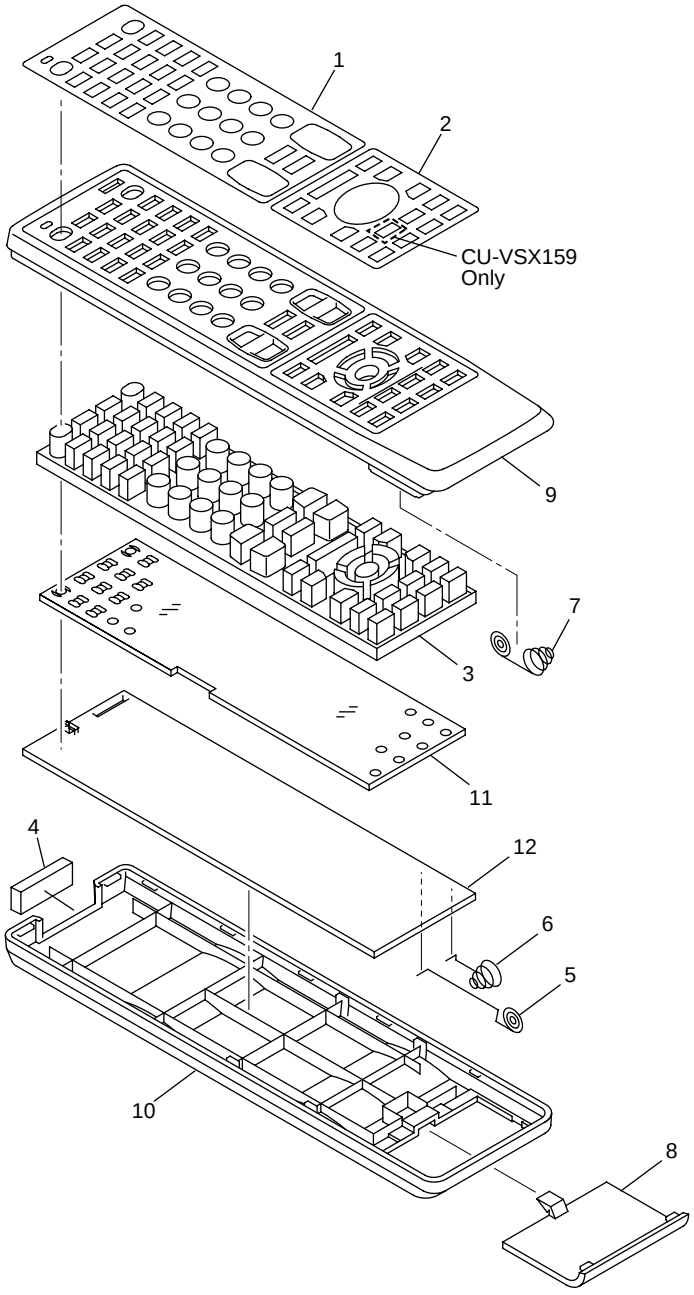

K1
K2
K12
K13
K18
K6
K7
EL
HON
GND
VDD
IC13
IC14
LC35256CM
LC35256CM
RRC4000-7201R
401RRC-193-02R

SIDE B

7.3.2 AXD7212 (CU-VSX159) and AXD7213 (CU-VSX161)

7.3.2.1 EXPLODED VIEWS AND PARTS LIST

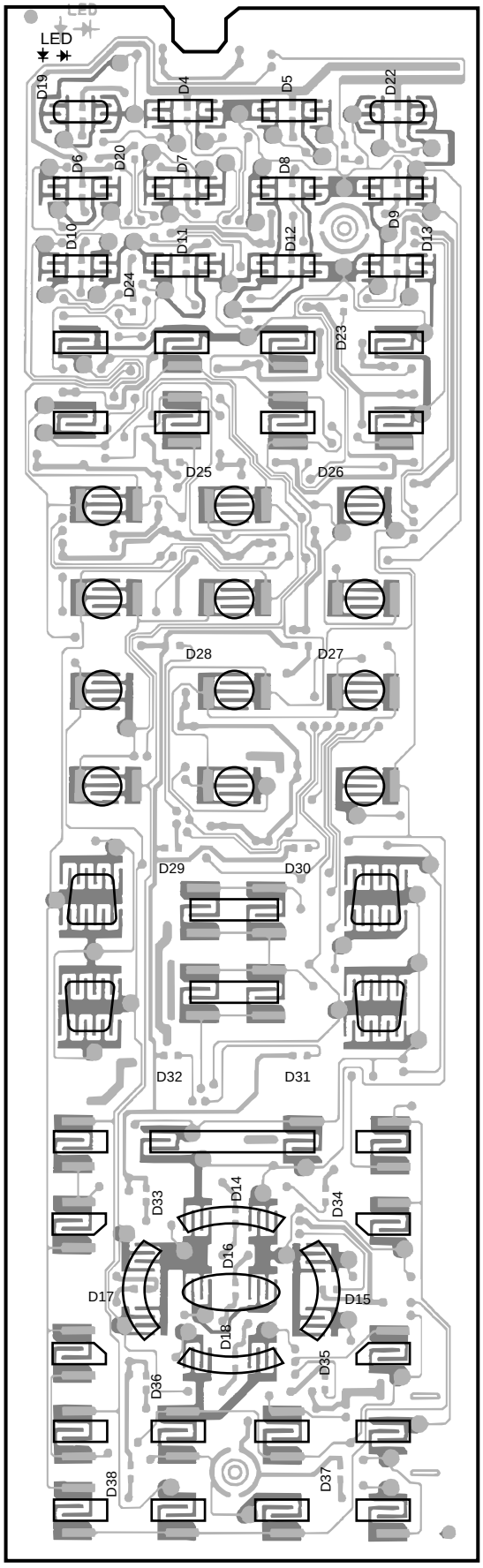
NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*



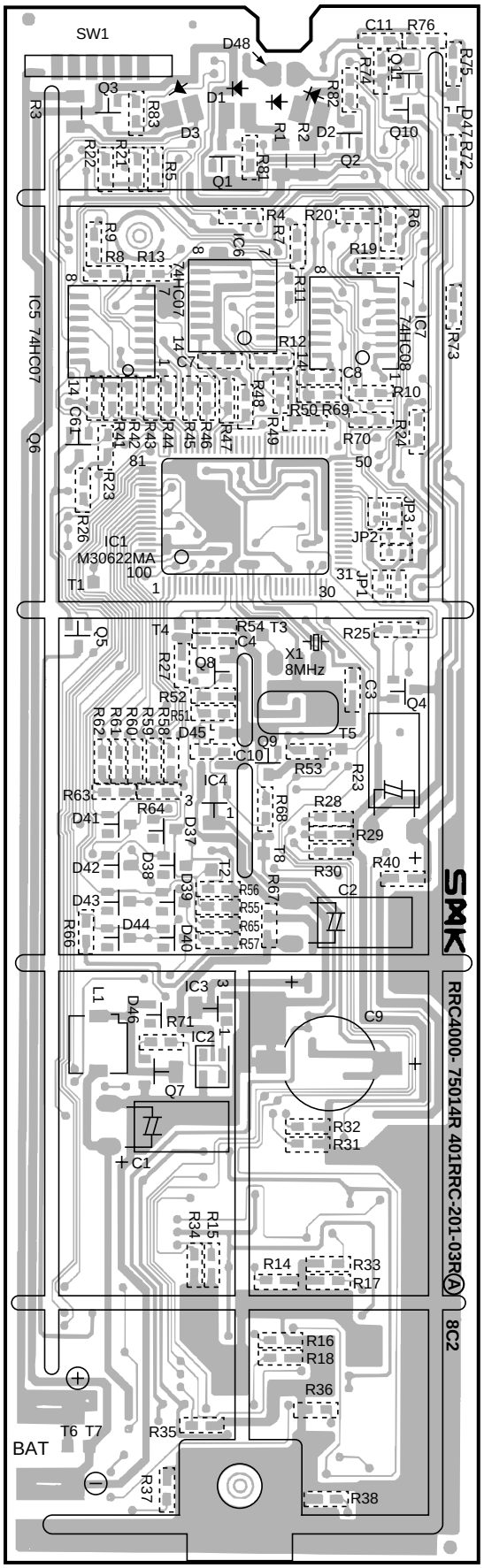
● PARTS LIST

Mark	No.	Description	Part No.
	1	Name Plate A	AZA7337
	2	Name Plate B (AXD7212)	AZA7338
	2	Name Plate B (AXD7213)	AZA7341
	3	Rubber Sheet (AXD7212)	AZA7339
	3	Rubber Sheet (AXD7213)	AZA7342
	4	Filter	AZA7340
	5	Terminal A (+)	AZB7141
	6	Terminal B (-)	AZB7142
	7	Spring	AZB7143
	8	Battery Cover	AZN2401
	9	Case (A)	AZN7780
	10	Case (B)	AZN7781
	11	Illumi Plate	AZN7782
NSP	12	PCB	AZW7254

7.3.2.2 PCB DIAGRAM

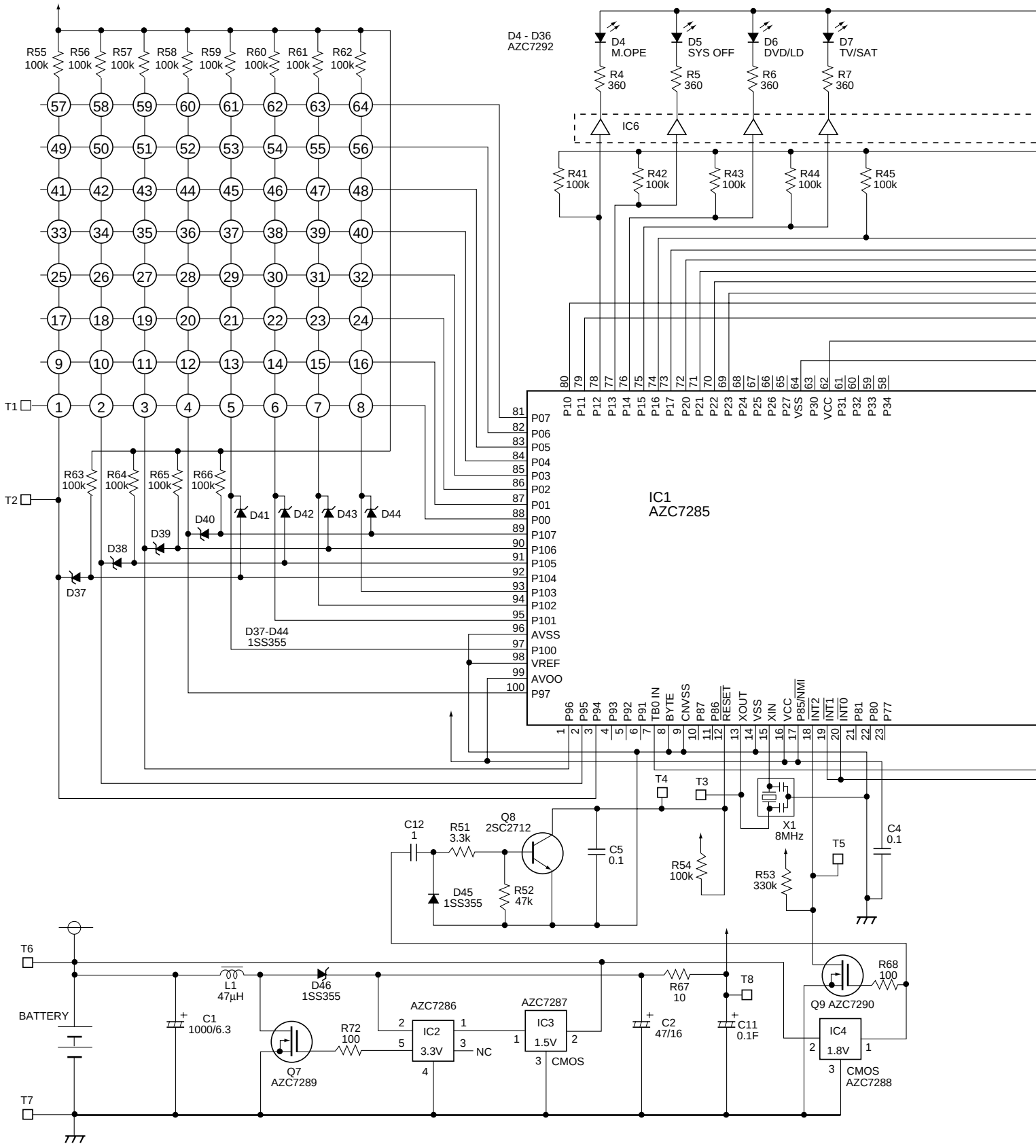


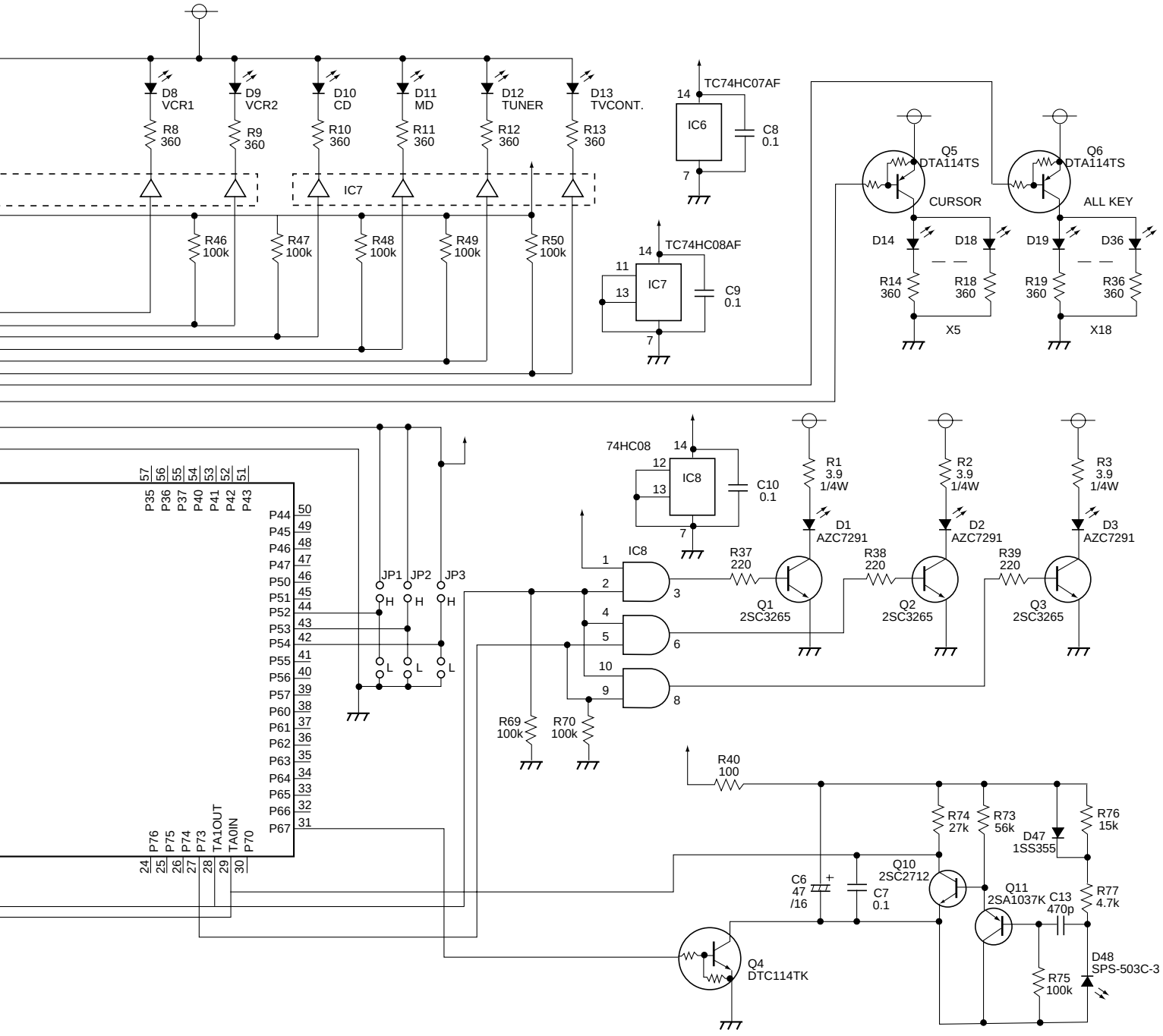
SIDE A



SIDE B

7.3.2.3 SCHEMATIC DIAGRAM




D8 VCR1
D9 VCR2
D10 CD
D11 MD
D12 TUNER
D13 TVCONT.
R8 360
R9 360
R10 360
R11 360
R12 360
R13 360
IC7
R46 100k
R47 100k
R48 100k
R49 100k
R50 100k
TC74HC07AF
IC6
C8 0.1
TC74HC08AF
IC7
C9 0.1
Q5 DTA114TS
Q6 DTA114TS
CURSOR
ALL KEY
D14
D18
D19
D36
R14 360
R18 360
R19 360
R36 360
X5
X18
74HC08
IC8
C10 0.1
R1 3.9 1/4W
R2 3.9 1/4W
R3 3.9 1/4W
D1 AZC7291
D2 AZC7291
D3 AZC7291
R37 220
R38 220
R39 220
Q1 2SC3265
Q2 2SC3265
Q3 2SC3265
JP1
JP2
JP3
R69 100k
R70 100k
R40 100
R74 27k
R73 56k
R76 15k
D47 1SS355
Q10 2SC2712
Q11 2SA1037K
C6 47 /16
C7 0.1
C13 470p
R77 4.7k
D48 SPS-503C-3
R75 100k
Q4 DTC114TK
P35
P36
P37
P40
P41
P42
P43
P44
P45
P46
P47
P50
P51
P52
P53
P54
P55
P56
P57
P60
P61
P62
P63
P64
P65
P66
P67
P76
P75
P74
P73
TA1OUT
TA0IN
P70

7.3.2.4 PCB PARTS LIST

NOTES: ● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω → 56×10^1 → 561 ..... RD1/4PU 5 6 1 J
47k Ω → 47×10^3 → 473 ..... RD1/4PU 4 7 3 J
0.5 Ω → R50 ..... RN2H R 5 0 K
1 Ω → 1R0 ..... RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω → 562×10^1 → 5621 ..... RN1/4PC 5 6 2 1 F

Mark	No.	Description	Part No.
	IC1	U-COM(M30662)	AZC7285
	IC2	VOLTAGE REG. 3.3V	AZC7286
	IC3	VOLTAGE DETECTOR 1.5	AZC7287
	IC4	VOLTAGE DETECTOR 1.8	AZC7288
	IC5, IC6		TC74HC07AF
	IC7		TC74HC08AF
	Q7	FET(2SK1959)	AZC7289
	Q9	FET(2SK2009)	AZC7290
	Q5, Q6		DTA114TS
	Q4		DTC114TK
	Q11		2SA1037K
	Q8, Q10		2SC2712
	Q1–Q3		2SC3265
	D1–D3	INFRARED LED	AZC7291
	D4–D36	ORANGE LED	AZC7292
	D48	PIN PHOTO DIODE	SPS-503C-3
	D37–D47		1SS355

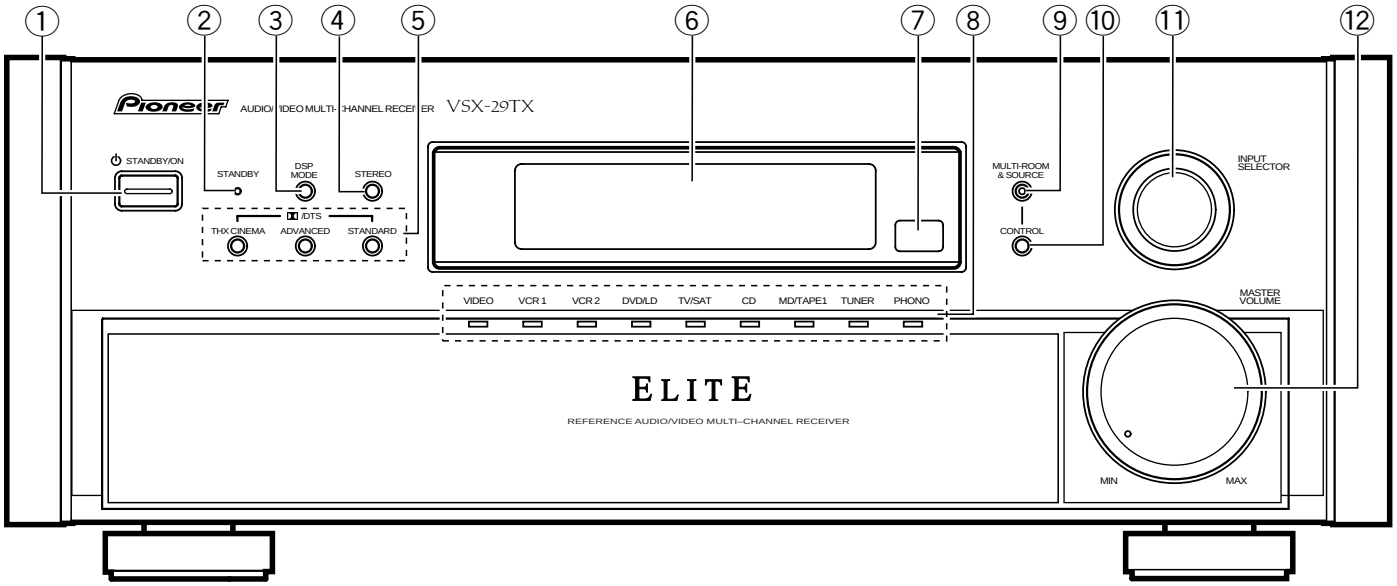
8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

■ Front Section (VSX-29TX)

All the controls on the front panel are explained and/or referenced here. To open the front panel push gently on the lower third of the panel.

VSX-29TX



① ⏻ STANDBY/ON button

Press to switch the receiver ON or into STANDBY mode.

② STANDBY indicator

Lights when the receiver is in STANDBY mode. (Please note that this receiver consumes a small amount of power (1.0 W) during the standby mode.)

③ DSP MODE button

Press repeatedly to select a DSP sound mode (HALL 1, HALL 2, JAZZ, DANCE, THEATER 1, or THEATER 2). Use these modes to produce surround sound from standard (two channel) stereo sources and create different listening environments.

④ STEREO button

Press to select the STEREO sound mode. In this mode, sound comes from the front (left and right) speakers only.

⑤ DD/DTS buttons

THX CINEMA : Press to select the HOME THX CINEMA mode when listening to Dolby Digital, Dolby Pro Logic or DTS a variety of other sources.

ADVANCED THEATER : Press to select one of the four Advanced Theater modes.

STANDARD : Press for pure decoding of multi channel sources.

⑥ Display

⑦ Remote sensor

Point the remote control toward the remote sensor to operate the receiver.

⑧ Source indicators

Shows the source currently selected.

⑨ MULTI-ROOM & SOURCE button

Press to enable multi room operation (requires an optional PIONEER Multi-Room Remote Sensor Unit MR-100 or other IR receiver).

⑩ CONTROL button

Use to select the function or volume of the MULTI ROOM system.

⑪ INPUT SELECTOR dial

Turn to select a source component. The source indicators show the current component:

DVD/LD : DVD player or Laser Disc player.

TV/SAT : TV tuner or satellite tuner.

CD : Compact Disc player.

MD/TAPE 1 : Tape deck or Mini Disc recorder connected to MD/TAPE 1 inputs/outputs.

TUNER : The built-in tuner.

PHONO : Turntable.

VIDEO : Video camera (etc.) connected to the VIDEO INPUT on the front panel.

VCR 1 : Video cassette recorder connected to VCR 1 inputs.

VCR 2 : Video cassette recorder or other component connected to VCR 2 inputs.

⑫ MASTER VOLUME

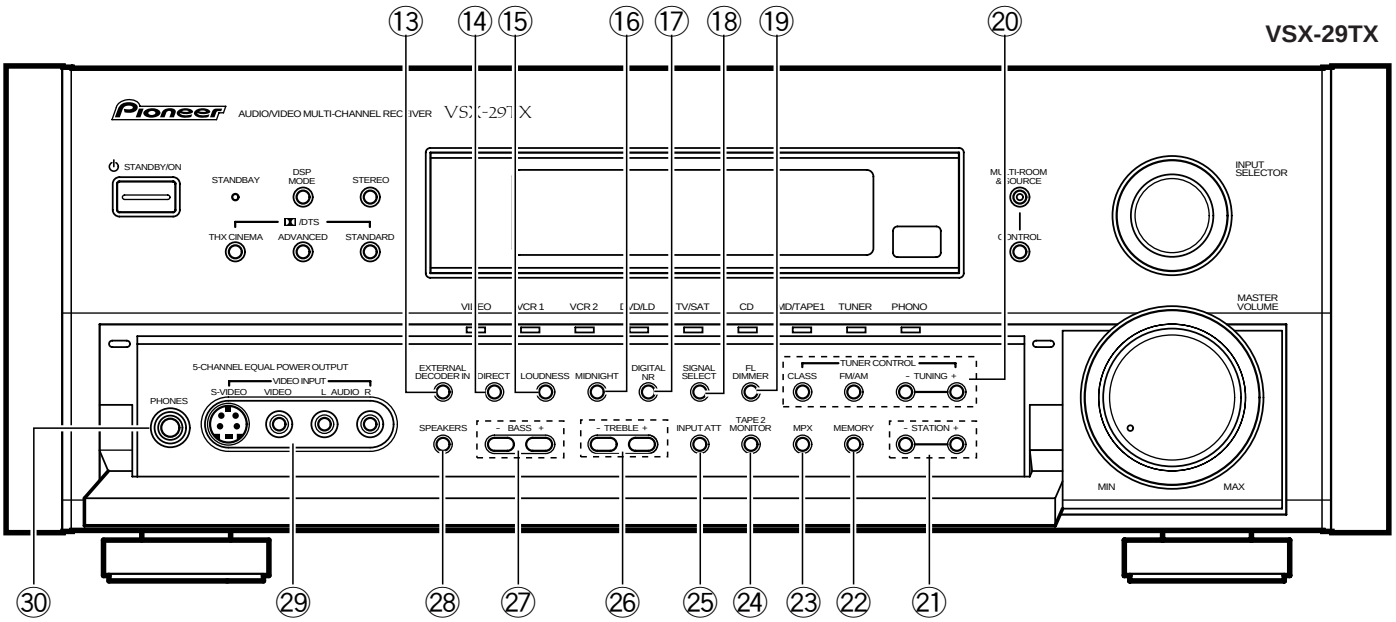
Adjusts the overall receiver volume.

⑬ EXTERNAL DECODER IN

Use to hook up an external component that can decode other types of signals and input them into the VSX-29TX.

⑭ DIRECT button

Switches DIRECT playback on or off. Use to bypass the tone controls and channel level for the most accurate reproduction of a program source. It will automatically put the receiver in STEREO mode for the function being used for DIRECT playback.



⑮ LOUDNESS button
Switches the LOUDNESS mode on or off.

⑯ MIDNIGHT button
Switches the MIDNIGHT LISTENING mode on or off.

⑰ DIGITAL NR button
Switches the DIGITAL NR on or off (STEREO mode only).

⑱ SIGNAL SELECT button
Use to select the signal from the digital components. SIGNAL SELECT repeatedly to select one of the following:

ANALOG : To select an analog signal.

DIGITAL : To select a optical or coaxial digital signal.

AC-3 RF : To select an AC-3 RF signal.

AUTO : This is the default. If there are both analog and digital input signals, the receiver automatically selects the digital signal.

⑲ FL DIMMER button
Use to adjust the brightness of the main display.

⑳ TUNER CONTROL buttons
CLASS : Press repeatedly to switch the preset station classes.

FM/AM : Press to select the AM or FM band.

TUNING –/+ : Use to manually tune to radio stations.

㉑ STATION –/+ buttons
Use to choose programmed radio stations.

㉒ MEMORY button
Press to start the memorization of a preset station.

㉓ MPX button
Press to switch between auto stereo and MONO reception of FM broadcasts. When the broadcast signal is weak, selecting MONO will improve the sound quality.

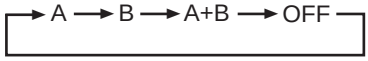
㉔ TAPE 2 MONITOR button
Selects the tape deck (MD recorder, etc.) connected to the TAPE 2 MONITOR inputs/outputs. Allows monitoring of a recording as it's being made.

㉕ INPUT ATT button
Use to lower the input level of an analog signal that is too powerful, thus causing the receiver to distort (the overload indicator will light furiously).

㉖ TREBLE (–/+) button
Use to adjust the high frequencies.

㉗ BASS (–/+) button
Use to adjust low frequencies.

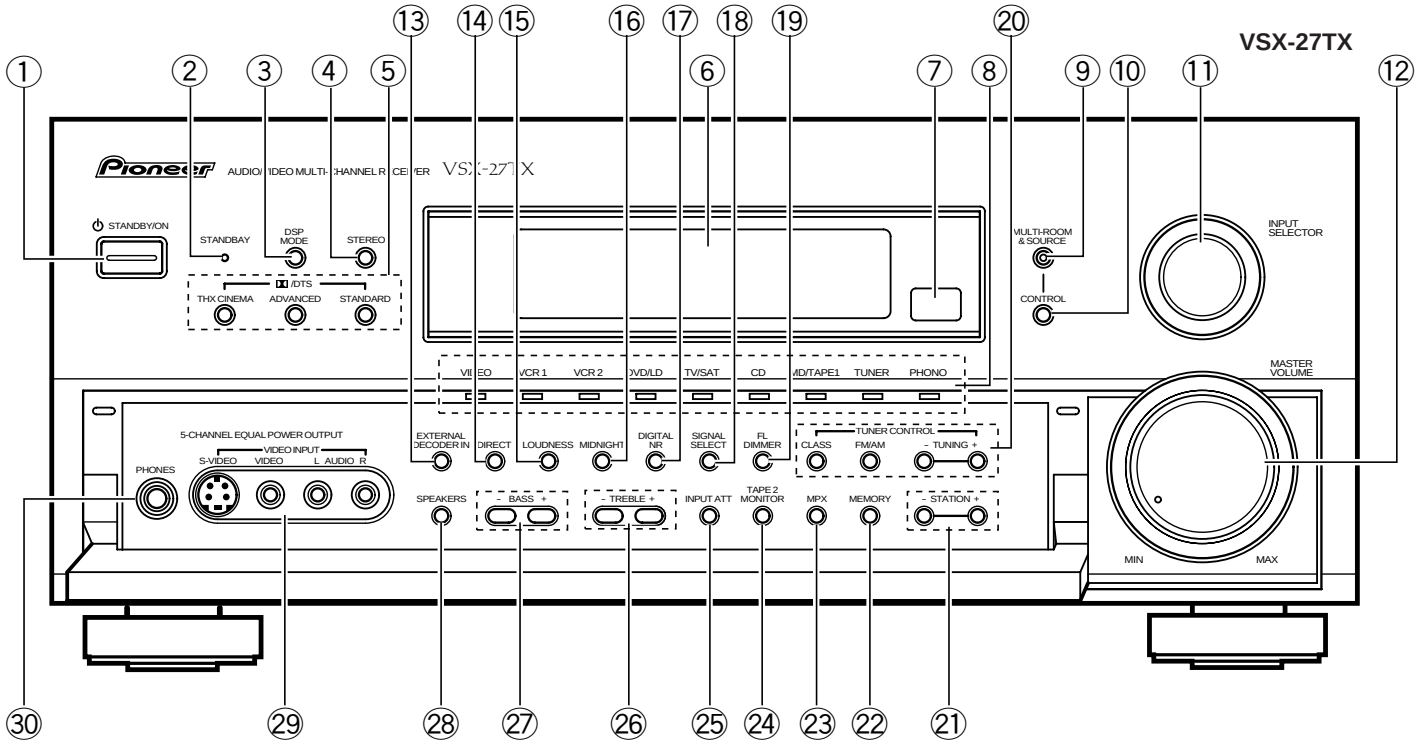
㉘ SPEAKERS (A/B) buttons
A is the primary setting. It plays all speakers hooked up to the A system. A & B setting only plays the front speakers of both the A & B systems and the sub-woofer. Multi channel sources will be down-mixed to these speakers so no sound will be lost. B setting only plays the front speakers connected to the B system and multi channel sources will be down-mixed to these two speakers.



㉙ VIDEO INPUT jacks
S-VIDEO : Video input for connecting a video camera (etc.), that has an S-Video out.

VIDEO / AUDIO (L/R) : Video input for connecting a video camera, etc. that has standard video/audio outputs.

㉚ PHONES jack
Connect headphones for private listening (no sound will be heard through the speakers)


VSX-27TX
STANDBY/ON
STANDBAY
DSP MODE
STEREO
THX CINEMA
ADVANCED
STANDARD
MULTI-ROOM & SOURCE
CONTROL
INPUT SELECTOR
MASTER VOLUME
MIN
MAX
5-CHANNEL EQUAL POWER OUTPUT
VIDEO INPUT
S-VIDEO
VIDEO
L AUDIO R
PHONES
EXTERNAL DECODER IN
DIRECT
LOUDNESS
MIDNIGHT
DIGITAL NR
SIGNAL SELECT
FL DIMMER
TUNER CONTROL
CLASS
FM/AM
TUNING
SPEAKERS
BASS
TREBLE
INPUT ATT
TAPE 2 MONITOR
MPX
MEMORY
STATION
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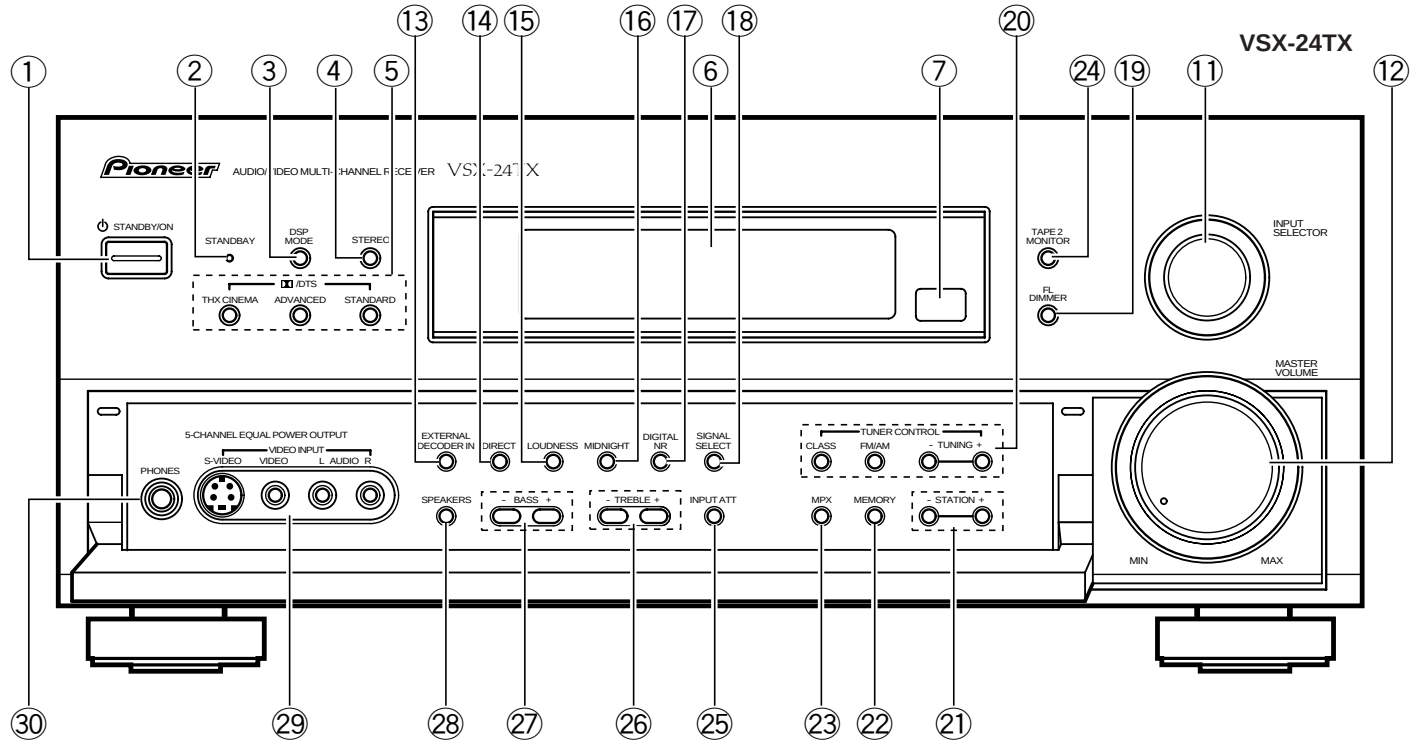
VSX-24TX
STANDBY/ON
STANDBAY
DSP MODE
STEREO
THX CINEMA
ADVANCED
STANDARD
TAPE 2 MONITOR
FL DIMMER
INPUT SELECTOR
MASTER VOLUME
MIN
MAX
5-CHANNEL EQUAL POWER OUTPUT
VIDEO INPUT
S-VIDEO
VIDEO
L AUDIO R
PHONES
EXTERNAL DECODER IN
DIRECT
LOUDNESS
MIDNIGHT
DIGITAL NR
SIGNAL SELECT
TUNER CONTROL
CLASS
FM/AM
TUNING
SPEAKERS
BASS
TREBLE
INPUT ATT
MPX
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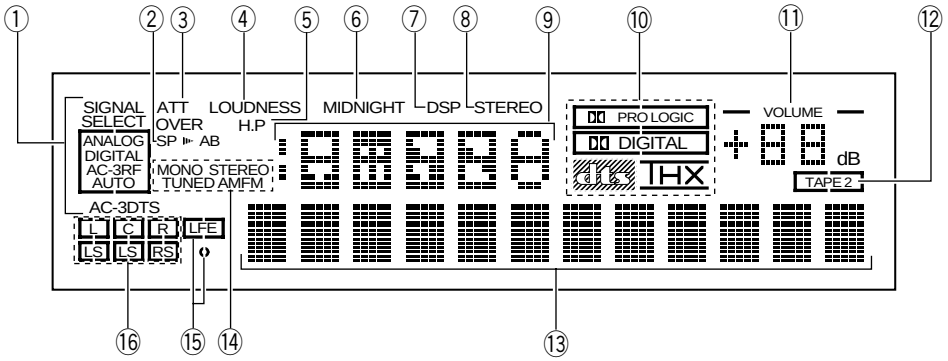
VSX-29TX, VSX-27TX, VSX-26TX, VSX-24TX, VSX-D908S

■ Display (VSX-29TX)

All the display information is explained and /or referenced here.



① SIGNAL SELECT indicators

Light to indicate the type of input signal selected for the current component (see “Front Panel“, ⑱, SIGNAL SELECT).

ANALOG : Lights when analog signals are assigned.
DIGITAL : Lights when digital audio signals are selected. (DVD/LD, CD, MD/TAPE 1, TV/SAT, VCR 1, VCR 2)
AC-3 RF : Lights when AC-3 RF signals are assigned. (DVD/LD, TV/SAT, VCR 1, VCR 2)
AUTO : Lights when the receiver is set to select the input signal automatically. (DVD/LD, CD, MD/TAPE 1, TV/SAT, VCR 1, VCR 2)
AC-3 : Lights when a source with Dolby Digital signals is played.
DTS : Lights when a source with DTS audio signals is played.

② Speaker indicators

Light to indicate the current speaker system (see “Front Panel“, ㉘, SPEAKERS (A/B)).

SP ▷ A : Lights when speaker system A is selected.
SP ▷ B : Lights when speaker system B is selected.
SP ▷ AB : Lights when speaker systems A & B are selected.

③ Analog level indicators

OVER : If “ANALOG” is selected in SIGNAL SELECT, this indicator lights to show that an excessively strong signal is being processed. When this occurs, press INPUT ATT on the front panel to attenuate (lower) the signal. Also, when “DIGITAL” is selected in SIGNAL SELECT, this indicator lights to show that a source containing an excessive amount of information is being processed.
ATT : Lights when INPUT ATT is used to reduce the level of the input signal (available in ANALOG mode only).

④ LOUDNESS indicator

Lights when the LOUDNESS mode is on.

⑤ H.P (headphones)

Lights when headphones are connected to the PHONES jack (speakers A and B turn off automatically).

⑥ MIDNIGHT indicator

Lights when the MIDNIGHT LISTENING mode is on.

⑦ DSP indicator

Light when a DSP or Advanced Theater mode is selected.

⑧ STEREO indicator

Lights when a STEREO mode is selected.

⑨ Radio Frequency/Function indicator

Displays the function or the frequency of the current radio station.

⑩ Surround/dts mode indicators

DIGITAL : When the Surround/dts mode on the receiver is on, this indicator lights to indicate playback of a Dolby Digital signal. However, PRO LOGIC lights during 2 channel playback of Dolby Digital.
PRO LOGIC : When the Surround/dts mode on the receiver is on, this indicator lights during 2 channel playback. **(** Both B or A+B speaker systems turn off automatically when headphones are plugged.)
DTS : Lights when DTS signals are input.
HOME THX CINEMA : Lights when the HOME THX CINEMA mode is selected.

⑪ MASTER VOLUME indication

Displays current level of master volume.

⑫ TAPE 2 indicator

Lights when the TAPE 2 monitor is on.

⑬ Character display

Displays sound modes, general information, etc.

⑭ Tuner indicators

MONO : Lights when the tuner is set to receive FM broadcasts and when selected MPX mode.
STEREO : Lights when a FM stereo broadcast is received in the auto stereo mode.
TUNED : Lights when a broadcast is received.
AM/FM : Light to indicate the current band (FM or AM).

⑮ LFE indicator

LFE (Low Frequency Effects) indicator lights to indicate that the program source contains an LFE channel. The indicator under the LFE lights during actual playback of the LFE signals (LFE signals are not present in all parts of the soundtrack).

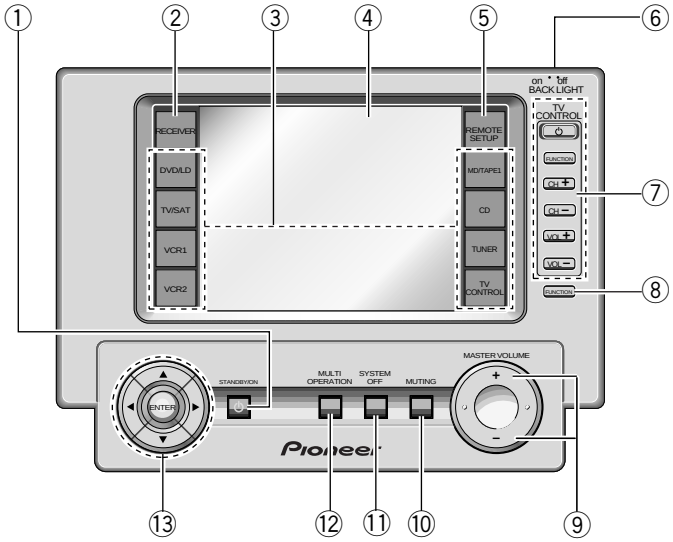
⑯ Program Format indicator

When a Dolby Digital or DTS signal is input, he following indicators light to show the channels being played back.
L : Left front*1*2, **C :** Center*1, **R :** Right front*1*2,
LS : Left surround*1,**S :** Surround (mono)*2,
RS : Right surround*1
*1: Indicates 5.1ch Dolby Digital or DTS playback.
*2: Indicates Dolby Pro Logic playback.

■ Remote Control Unit (VSX-29TX)

These pages describe the buttons on the remote control used to operate the receiver. Since the screen on this LCD remote control changes when you select a different function, explanations of buttons for controlling other components/functions can be found in the sections for those components/functions.

memo To turn on the remote control touch it anywhere on the screen.



① ⏻ **STANDBY/ON button**
Press to turn power of the receiver on or to STANDBY (off).

② **RECEIVER button**
Press to switch the remote control into receiver mode or to get receiver screens.

③ **Function buttons**
These buttons are the basic controls that switch the mode of the receiver and allow you to control your other components.
DVD/LD : Press to switch the remote control into DVD/LD mode.
TV/SAT : Press to switch the remote control into TV/SAT (satellite tuner) mode.
VCR 1 : Press to switch the remote control into VCR 1 mode.
VCR 2 : Press to switch the remote control into VCR 2 mode.
MD/TAPE 1 : Press to switch the remote control into MD/TAPE 1 mode.
CD : Press to switch the remote control into CD mode.
TUNER : Press to switch the remote control into TUNER mode.
TV CONTROL : Press so that the remote control can operate the TV CONTROL commands.

④ **REMOTE CONTROL screen**

⑤ **REMOTE SETUP button.**
Use to customize the remote control functions and the remote control itself.

⑥ **BACK LIGHT switch**
Switch the BACK LIGHT on or off.

⑦ **TV CONTROL buttons**
The following buttons are used to control the TV only and can be used once they are preset to control your TV.
POWER : Press to turn the power of the TV on/off.
FUNCTION : Press TV FUNC to select the TV for remote control operation.
CH +/– : Use these buttons to change the channel of the TV.
VOL +/– : Press to control the volume of the TV.

⑧ **FUNCTION button**
Press to select a source. The button will cycle through all the possible sources.

⑨ **MASTER VOLUME button**
Use to raise or lower the volume of the receiver.

⑩ **MUTE button**
Press to mute or restore the volume.

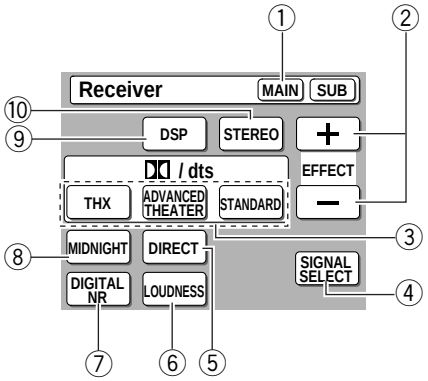
⑪ **SYSTEM OFF button**
This button turns off components in two ways. First, when pressed it will turn off all PIONEER components. Secondly, any component that has programmed into the SYSTEM OFF settings will be turned off.
For example : If you programmed power off in the SYSTEM OFF settings for your TV and VCR, pressing the SYSTEM OFF button will turn off these components even if they are not PIONEER products.

⑫ **MULTI OPERATION button**
Use this button to start the MULTI OPERATION mode.

⑬ **△/▽/◁/▷/ENTER buttons**
These buttons can be used for a variety of operations. In the SYSTEM SETUP menu, the △/▽ buttons can be used to adjust CHANNEL DELAY or CHANNEL LEVEL. The △/▽ buttons, pressed simultaneously, can be use to lock or unlock a setting.
These buttons are also used to control the DVD menu for the DVD remote control screen.

Basic Receiver LCD Screens

Receiver MAIN Screen



① Receiver MAIN button
Press this button to select the main receiver screen (above) when the remote control is on the sub receiver screen.

② EFFECT +/- button
Use these buttons to increase or decrease the amount of effect applied in a DSP or Advanced Theater mode. When the amount of effect is increased in a DSP/ Advanced Theater mode the characteristics of that mode become stronger and more noticeable. The scale ranges from 10-90 with 70 as the default setting. First turn on the DSP/Advanced Theater mode you want (by pressing the DSP/Advanced Theater button until you get the mode) and then increase or decrease the amount of effect.

③ /dts buttons
Press these buttons to put the receiver in the selected surround sound mode. For more information on the modes

④ SIGNAL SELECT button
Press SIGNAL SELECT repeatedly to select one of the following:

ANALOG : To select an analog signal.

DIGITAL : To select a digital signal (DVD/LD, TV/SAT, CD, MD/TAPE 1, VCR 1, VCR 2).

AC-3 RF : To select an AC-3 RF signal (DVD/LD, TV/ SAT, VCR 1, VCR 2).

AUTO : This is the default. If there are both analog and digital input signal, the receiver automatically selects digital.

⑤ DIRECT button
Switches DIRECT playback on or off. Use to bypass the tone controls and channel level for the most accurate reproduction of a program source. It will automatically put the receiver in STEREO mode for the function being used for DIRECT playback.

⑥ LOUDNESS button
Switches the LOUDNESS mode on or off.

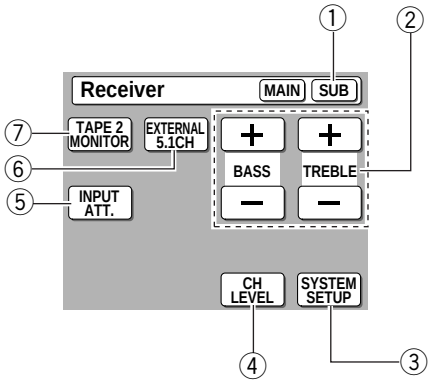
⑦ DIGITAL NR button
Switches the DIGITAL NR on or off (STEREO mode only).

⑧ MIDNIGHT button
Switches the MIDNIGHT LISTENING mode on or off.

⑨ DSP button
Press repeatedly to select a DSP sound mode.

⑩ STEREO button
Press to select the STEREO sound mode. In this mode, sound comes from the front (left and right) speakers only.

Receiver SUB Screen



① Receiver SUB button
Press this button to select the sub receiver screen (above) when the remote control is on the main receiver screen.

② BASS & TREBLE (+/–) buttons
Use to adjust the high and low frequencies (STEREO mode only).

③ SYSTEM SET UP button
Use to set up the speaker and sound systems.

④ CHANNEL LEVEL button
Use this feature to adjust the level of individual speakers during playback of a source.

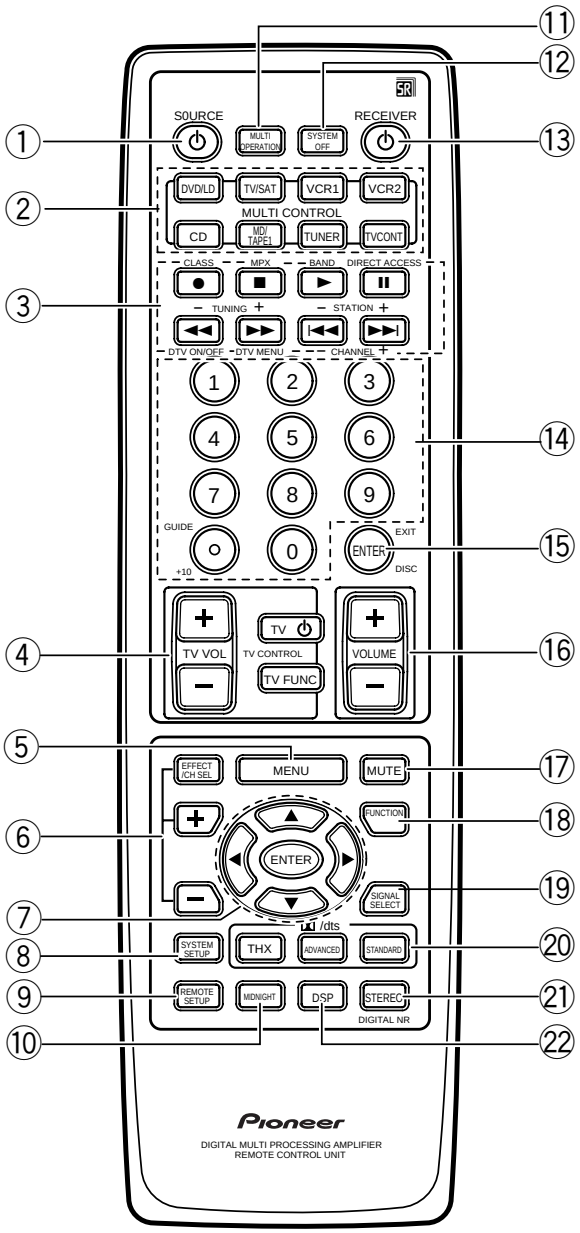
⑤ INPUT ATT button
Use to lower the input level of an analog signal that is too powerful, thus causing the receiver to distort (the overload indicator will light furiously).

⑥ EXTERNAL 5.1 CHANNEL button
Use to hook up an external component that can decode other types of signals and input them into the VSX-29TX.

⑦ TAPE 2 MONITOR button
Selects the tape deck (or MD recorder, etc.) connected to the TAPE 2 MONITOR inputs/outputs. Allows monitoring of a recording as it's being made.

■ Remote Control Unit (VSX-27TX/VSX-26TX/VSX-24TX/VSX-D908S)

These pages describe the buttons on the remote control used to operate the receiver.



① ⏻ SOURCE button

Use to turn on the power of your other components after you have recalled or taught the signals to this remote control.

② MULTI CONTROL buttons

Use these to select a source and the corresponding remote operation mode.

For example, pressing TUNER selects the built in tuner and sets the remote operation to the tuner functions.

③ Component Control buttons

Use to control specific components, like a CD player or DVD player, after you have programmed the remote control to do these operations and the remote is put in that operation mode.

④ TV CONTROL buttons

The following buttons are used to control the TV only and can be used no matter what function the remote control is set to.

TV ⏻ : Press to turn the power of the TV on/off.

TV FUNC : Press TV FUNC to select the TV for remote control operation.

TV VOL +/- : Press to control the volume of the TV.

⑤ MENU button

Use to get the various menus for your TV or DTV.

⑥ EFFECT/CH SEL +/– buttons

EFFECT : Use these buttons to increase or decrease the amount of effect applied in a DSP or Advanced Theater mode. When the amount of effect is increased in a DSP/ Advanced Theater mode the characteristics of that mode become stronger and more noticeable. The scale ranges from 10-90 with 70 as the default setting. First turn on the DSP/Advanced Theater you want (by pressing the DSP/Advanced Theater button until you get the mode) and then increase or decrease the amount of effect.

CH SEL : You may want to adjust the channels when listening to some sound sources. Use this button to select the channel you want to adjust.

+/– : Use these buttons to select the amount of effect in a sound mode and to adjust the channel level when making sound settings.

⑦ ▲/▼/◄/►/ENTER buttons

Use to operate the on-screen menu on your TV screen and enter commands when setting up surround sound, speakers levels & settings, and other set up features. Specific use of these buttons is described in conjunction with the operations they perform. For more information see each individual section.

⑧ SYSTEM SET UP button

Use to set up the speaker and sound systems. For more information see “Surround Sound Setup“ .

⑨ REMOTE SETUP button.

Use to customize the remote control functions and the remote control itself. (See “Setting Up the Remote Control to Control Other Components“, “Multi Operation“ .)

To access the EXTERNAL DECODER option, press the REMOTE SETUP button and the SIGNAL SELECT button simultaneously.

⑩ MIDNIGHT button

Switches the MIDNIGHT mode on or off.

⑪ MULTI OPERATION button

Use this button to start the MULTI OPERATION mode.

⑫ SYSTEM OFF button

This button turns off components in two ways. First, when pressed it will turn off all PIONEER components. Secondly, any component that has programmed into the MULTI OPERATIONS settings will also be turned off.

For example : If you programmed power on for your TV and VCR, pressing the SYSTEM OFF button will turn off these components even if they are not PIONEER products.

⑬ ⏻ RECEIVER button

Press to turn power of the receiver on or to STANDBY (off).

⑭ Number buttons

These buttons can perform a variety of different functions depending on the remote operation mode. They are most useful for CD and tuner operations.

⑮ ENTER/EXIT/DISC button

These buttons can perform a variety of different functions depending on the remote operation mode.

⑯ MASTER VOLUME button

Use to raise or lower the volume of the receiver.

⑰ MUTE button

Press to mute or restore the volume.

⑱ FUNCTION button

Press to select a source. The button will cycle through all the possible sources.

⑲ SIGNAL SELECT button

Press SIGNAL SELECT repeatedly to select one of the following:

ANALOG : To select an analog signal.

DIGITAL : To select a digital signal (DVD/LD, TV/SAT, CD, MD/TAPE 1, VCR 1, VCR 2).

AC-3 RF : To select an AC-3 RF signal (DVD/LD, TV/SAT, VCR 1, VCR 2), VSX-27TX only.

AUTO : This is the default. If there are both analog and digital input signal, the receiver automatically selects the best possible signal (VSX-27TX only).

Press the SIGNAL SELECT and REMOTE SETUP buttons simultaneously to switch from the SIGNAL SELECT operation to EXTERNAL DECODER operation. Then press the button to get the EXTERNAL DECODER function. To get back to the SIGNAL SELECT control, press the REMOTE SETUP button and the SIGNAL SELECT button simultaneously once again.

⑳ DD /dts buttons

Press these buttons to put the receiver in the selected sound mode. For more information on the modes .

㉑ STEREO/DIGITAL NR button

STEREO : Press this button to put the receiver into stereo mode when it's in a different sound mode.

DIGITAL NR : Switches the DIGITAL NR on or off.

㉒ DSP button

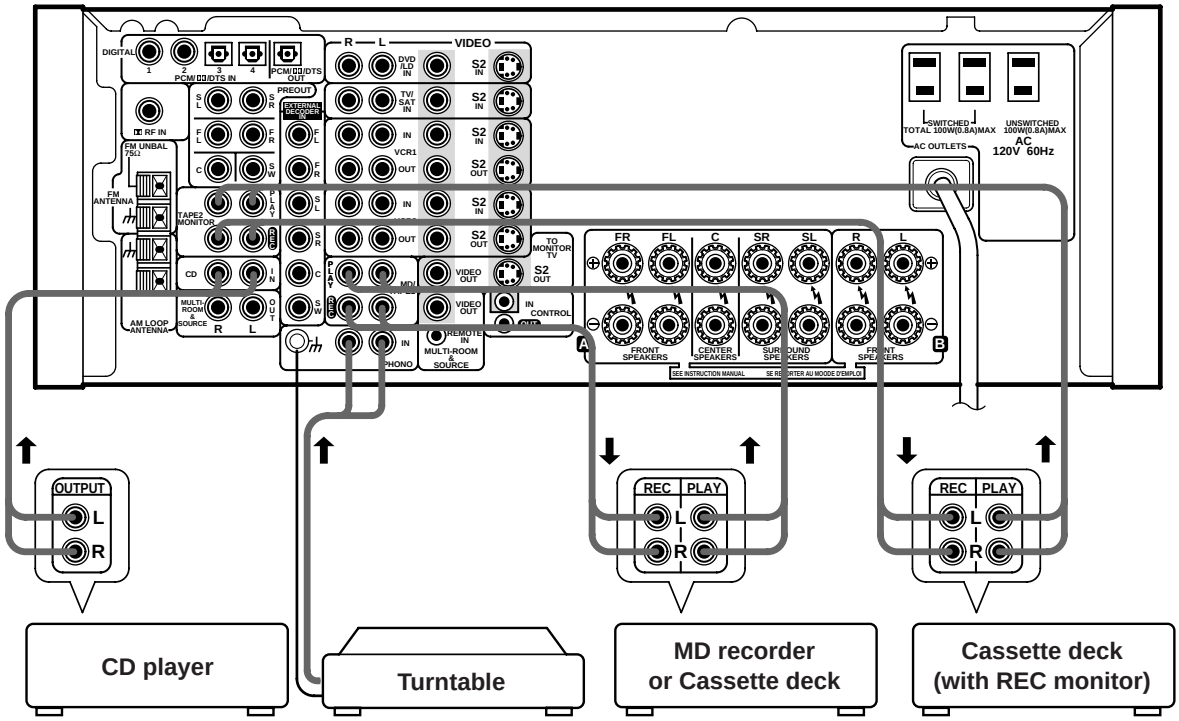
Press repeatedly to select a DSP sound mode.

■ Audio Components Connections

To begin set up connect your audio components to the jacks as shown below. These are all analog connections and your analog audio components (turntable, cassette deck) use these jacks. Remember that for components you want to record with you need to hook up four plugs (a set of stereo ins and a set of stereo outs), but for components that only play (like a turntable) you only need to hook up one set of stereo plugs (two plugs). To use DTS surround sound features you must hook up your digital components to the digital inputs but it is also a good idea to hook up your digital components to analog audio jacks. If you want to record to/from digital components (like an MD) to/from analog components you must hook up your digital equipment with these analog connections.
When connecting your equipment always make sure the power is turned off and the power cord is disconnected from the wall outlet.

*The arrows indicate the direction of the audio signal.

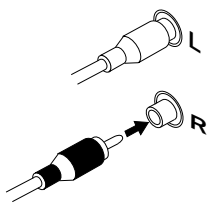
VSX-29TX



If your turntable has a ground wire, connect it to the SIGNAL GND terminal.

■ Audio cords

Use audio cords (not supplied) to connect the audio components.



Connect red plugs to R (right) and white plugs to L (left).
Be sure to insert completely.

Cassette deck placement

Depending on where the cassette deck is placed, noise may occur during playback of your cassette deck which is caused by leakage flux from the transformer in the receiver. If you experience noise, move the cassette deck farther away from the receiver.

8.2 SPECIFICATIONS

VSX-29TX :

Continuous average power output of 120 watts* per channel, min., at 6 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

Continuous Power Output
- Front ..... 120 W + 120 W (20-20 kHz, 0.09 %, 6 Ω)
- Center ..... 120 W (20-20 kHz, 0.09 %, 6 Ω)
- Rear ..... 120 W + 120 W (20-20 kHz, 0.09 %, 6 Ω)

Input (Sensitivity/Impedance)
- PHONO MM ..... 4.7 mV/47 kΩ
- VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD, MD/TAPE 1, TAPE 2 ..... 335 mV/47 kΩ

Phono Overload level (T.H.D.0.1 %, 1kHz)
- PHONO MM ..... 120 mV

Frequency Response
- PHONO MM ..... 20 Hz to 20,000 Hz ± 0.3 dB
- VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD, MD/TAPE 1, TAPE 2 ..... 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB

Output (Level/Impedance)
- VCR 1 REC, VCR 2 REC, MD/TAPE 1 REC, TAPE 2 REC .. 335 mV/2.2 kΩ

Tone Control
- BASS ..... ± 6 dB (100 Hz)
- TREBLE ..... ± 6 dB (10 kHz)
- LOUDNESS ..... +3 dB (100 Hz/10 kHz)

Signal-to-Noise Ratio (IHF, short circuited, A network)
- PHONO MM ..... 80 dB
- VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD, MD/TAPE 1, TAPE 2 ..... 101 dB

Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]
- PHONO MM ..... 80 dB
- VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD, MD/TAPE 1, TAPE 2 ..... 83 dB

* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.

** Measured by Audio Spectrum Analyzer.

VIDEO Section

Input (Sensitivity/Impedance)
VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO ..... 1 Vp-p/75 Ω

Output (Level/Impedance)
- VCR 1, VCR 2, MONITOR ..... 1 Vp-p/75 Ω

Frequency Response
- VCR 1, VCR 2, MONITOR ..... 5 Hz to 10 MHz $^{+0}_{-3}$ dB

Signal-to-Noise Ratio ..... 65 dB

FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... Mono: 13.2 dBf, IHF (1.3 µV/75 Ω)
50 dB Quieting Sensitivity ..... Mono: 20.2 dBf
Stereo: 38.6 dBf
Signal-to-Noise Ratio ..... Mono: 73 dB (at 85 dBf)
Stereo: 70 dB (at 85 dBf)
Distortion ..... Stereo: 0.5 % (1 kHz)
Alternate Channel Selectivity ..... 60 dB (400 kHz)
Stereo Separation ..... 40 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (± 1) dB
Antenna Input ..... 75 Ω unbalanced

AM Tuner Section

Frequency Range ..... 530 kHz to 1,700 kHz
Sensitivity (IHF, Loop antenna) ..... 350 µV/m
Selectivity ..... 25 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... Loop antenna

Miscellaneous

Power Requirements ..... AC 120 V, 60 Hz
Power Consumption ..... 460 W, 630 VA
Power Consumption in Standby mode ..... 1.0 W
AC Outlet SWITCHED (×2) ..... Total 100 W (0.8 A) MAX
AC Outlet UNSWITCHED ..... 100 W (0.8 A) MAX
Dimensions ..... 457 (W) × 174 (H) × 470 (D) mm
17-15/16 (W) × 6-13/16 (H) × 18-1/2 (D) in.
Weight (without package) ..... 16.7 kg (36 lb 13 oz)

Furnished Parts

FM Antenna 1
AM Loop Antenna 1
Dry Cell Batteries (SIZE "AA" (IEC LR6)) 4
Remote Control Unit 1
Cushion for Remote 4
Operating Instructions 1

NOTE:
Specifications and the design are subject to possible modifications without notice, due to improvements.

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VSX-27TX :
Amplifier Section

Continuous average power output of 120 watts* per channel, min., at 6 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

VSX-26TX:
Continuous average power output of 100 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

VSX-24TX :
Continuous average power output of 90 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.09 % total harmonic distortion (front).**

VSX-27TX :
Continuous Power Output
- Front ..... 120 W + 120 W (20-20 kHz, 0.09 %, 6 Ω)
- Center ..... 120 W (20-20 kHz, 0.09 %, 6 Ω)
- Rear ..... 120 W + 120 W (20-20 kHz, 0.09 %, 6 Ω)

VSX-26TX :
Continuous Power Output
- Front ..... 100 W + 100 W (20-20 kHz, 0.09 %, 8 Ω)
- Center ..... 100 W (20-20 kHz, 0.09 %, 8 Ω)
- Rear ..... 100 W + 100 W (20-20 kHz, 0.09 %, 8 Ω)

VSX-24TX :
Continuous Power Output
- Front ..... 90 W + 90 W (20-20 kHz, 0.09 %, 8 Ω)
- Center ..... 90 W (20-20 kHz, 0.09 %, 8 Ω)
- Rear ..... 90 W + 90 W (20-20 kHz, 0.09 %, 8 Ω)

Input (Sensitivity/Impedance)
- PHONO MM ..... 4.7 mV/47 kΩ
- VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD, MD/TAPE 1, TAPE 2 ..... 335 mV/47 kΩ

Phono Overload level (T.H.D.0.1 %, 1kHz)
- PHONO MM ..... 120 mV

Frequency Response
- PHONO MM ..... 20 Hz to 20,000 ± 0.3 dB
- VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD, MD/TAPE 1, TAPE 2 ..... 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB

Output (Level/Impedance)
- VCR 1 REC, VCR 2 REC, MD/TAPE 1 REC, TAPE 2 REC .. 335 mV/2.2 kΩ

Tone Control
- BASS ..... ± 6 dB (100 Hz)
- TREBLE ..... ± 6 dB (10 kHz)
- LOUDNESS ..... +3 dB (100 Hz/10 kHz)

Signal-to-Noise Ratio (IHF, short circuited, A network)
- PHONO MM ..... 80 dB
- VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD, MD/TAPE 1, TAPE 2 ..... 101 dB

Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]
- PHONO MM ..... 80 dB
- VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO, CD, MD/TAPE 1, TAPE 2 ..... 83 dB

* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.
** Measured by Audio Spectrum Analyzer.

VIDEO Section
Input (Sensitivity/Impedance)
VCR 1, VCR 2, DVD/LD, TV/SAT, VIDEO ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
- VCR 1, VCR 2, MONITOR ..... 1 Vp-p/75 Ω

Frequency Response
- VCR 1, VCR 2, MONITOR ..... 5 Hz to 10 MHz $^{+0}_{-3}$ dB

Signal-to-Noise Ratio ..... 65 dB

FM Tuner Section
Frequency Range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... Mono: 13.2 dBf, IHF (1.3 µV/75 Ω)
50 dB Quieting Sensitivity ..... Mono: 20.2 dBf
Stereo: 38.6 dBf
Signal-to-Noise Ratio ..... Mono: 73 dB (at 85 dBf)
Stereo: 70 dB (at 85 dBf)
Distortion ..... Stereo: 0.5 % (1 kHz)
Alternate Channel Selectivity ..... 60 dB (400 kHz)
Stereo Separation ..... 40 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (± 1) dB
Antenna Input ..... 75 Ω unbalanced

AM Tuner Section
Frequency Range ..... 530 kHz to 1,700 kHz
Sensitivity (IHF, Loop antenna) ..... 350 µV/m
Selectivity ..... 25 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... Loop antenna

Miscellaneous
Power Requirements ..... AC 120 V, 60 Hz
VSX-27TX :
Power Consumption ..... 460 W, 630 VA
Power Consumption in Standby mode ..... 1.0 W
AC Outlet SWITCHED (×2) ..... Total 100 W (0.8 A) MAX
AC Outlet UNSWITCHED ..... 100 W (0.8 A) MAX
Dimensions ..... 420 (W) × 173 (H) × 470 (D) mm
16-9/16 (W) × 6-13/16 (H) × 18-1/2 (D) in
Weight (without package) ..... 14.7 kg (32 lb 7 oz)
VSX-26TX/24TX :
Power Consumption ..... 400 W, 550 VA
Power Consumption in Standby mode ..... 1.0 W
AC Outlet SWITCHED (×2) ..... Total 100 W (0.8 A) MAX
AC Outlet UNSWITCHED ..... 100 W (0.8 A) MAX
Dimensions ..... 420 (W) × 173 (H) × 470 (D) mm
16-9/16 (W) × 6-13/16 (H) × 18-1/2 (D) in
Weight (without package) ..... 14.1 kg (31 lb 1 oz)

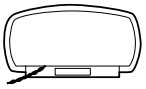
Furnished Parts
FM Antenna 1
AM Loop Antenna 1
Dry Cell Batteries (SIZE "AA" (IEC LR6)) 2
Remote Control Unit 1
Operating Instructions 1

NOTE:
Specifications and the design are subject to possible modifications without notice, due to improvements.

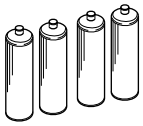
VSX-29TX, VSX-27TX, VSX-26TX, VSX-24TX, VSX-D908S

Accessories (VSX-29TX)

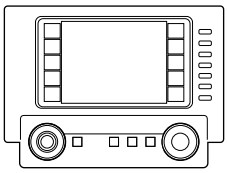
FM wire antenna (ADH1015)



AM loop antenna (ATB7009)



"AA" IEC LR6 batteries x 4



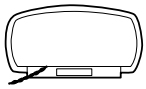
Remote control unit (CU-VSX158 : AXD7216)

Touch pen (E-AA1445-001)

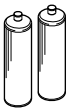
Cushion for Remote x 4 (AXG7080)

Accessories (VSX-27TX/VSX-26TX/VSX-24TX/VSX-D908S)

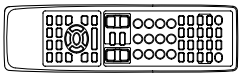
FM wire antenna (ADH1015)



AM loop antenna (ATB7009)



"AA" IEC LR6 batteries x 2



Remote control unit (CU-VSX159 : AXD7212) VSX-27TX/VSX-26TX/VSX-24TX, (CU-VSX161 : AXD7213) VSXD908S